DOCUMENT RESUME

ED 161 240 EC 112 495

AUTHOR	Brownsmith, Cynthia L.
TITLE	The Skill Acquisition Model: Behavioral Rehearsal as a Method for Developing Pro-Social Adaptive Behaviors in Elementary School Children. Final Report 52.3.
INSTITUTION	Indiana Univ., Bloomington. Center for Innovation in Teaching the Handicapped.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
PUB DATE	Aug 76
CONTRACT	300-76-0032
NOTE	125p.
AVAILABLE FROM	Indiana University, Center for Innovation in Teaching the Handicapped, School of Education, Bloomington, Indiana 47401 ($2.00)
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	*Behavior Change; *Behavior Problems; Conceptual Schemes; Emotionally Disturbed; Exceptional Child Research; Intermediate Grades; *Interpersonal Competence; *Intervention; *Models
IDENTIFIERS	*Behavior Rehearsal Intervention Program

ABSTRACT

A study, involving six students in grades 4 through 6 who exhibited inappropriate or inadequate social behaviors, investigated the effectiveness of the Behavior Rehearsal Intervention Program in promoting social skills for pre-adolescents. Three Ss participated in an initial Placebo-Attention Control Condition followed by the Behavior Rehearsal Intervention Program. The other three Ss participated in the intervention program without the placebo condition. The placebo condition consisted of listening to tape recordings of old radio shows. The intervention program consisted of the presentation of tape recorded classroom situations and rehearsal of prosocial behaviors. Because the analysis of the observational data produced differential results, it was difficult to summarize findings. In essence, the main research hypothesis that the rate of general cooperative classroom behaviors would increase as a function of participation in the intervention program was supported by two cases. However, these results were not replicated for the remaining four students. Limitations of the study were examined. (Appended materials include information on the Socio-Behavioral Interaction System, the text of the introduction and discussion of classroom conflicts and general behavior rehearsal instructions, and sample classroom situation forms.) (SBH)

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THE SKILL ACQUISITION MODEL: BEHAVIOR REHEARSAL AS A METHOD FOR DEVELOPING PRO-SOCIAL ADAPTIVE BEHAVIORS IN ELEMENTARY SCHOOL CHILDREN

Cynthia L. Brownsmith

August, 1976

Final Report 52.3

Center for Innovation in Teaching the Handicapped

Indiana University

This research was supported by contract #OEC 300-76-0032 from the U.S. Office of Education, Bureau of Education for the Handicapped to the Center for Innovation in Teaching the Handicapped. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

EC 112 495

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CHAPTER I

INTRODUCTION AND RATIONALE

Classroom observational research has shown that teachers spend a disproportionate amount of time attempting to manage the disruptive behaviors of the acting-out child (Walker, Fiegenbaum & Hops, 1971; Walker & Buckley, 1973). The high rate of such behaviors as disrupting class, failing to follow the teacher's direction, physical or verbal aggression and destruction of property can represent a serious impediment to teachers, peers, to the total classroom environment, and, of course, to the child himself (Hops, Walker & Hutton, 1973). A number of strategies have been attempted to reduce such disruptive behaviors, including psychodynamic (Redl, 1966), psychoeducational (Morse, 1958) and behavioral approaches (Walker, Feigenbaum & Hops, 1971). There have been few attempts, however, to utilize current developments in behavior therapy for this purpose.

The various behavior therapies have typically focused on overt problematic behaviors. The theoretical explanations for these behavioral approaches differ, however. Frequently, the aim of the treatment is removal of negative behaviors. For example, operant therapy seeks out the presenting behavioral symptoms and the reinforcement which sustains that behavior. It is by changing the reinforcement in one way or another that operant therapy attempts to eliminate the behavior problems. Wolpe's (1969) notion of treating specific maladaptive behaviors acknowledged anxiety as a precursor to the behavior problems, and the particular focus of treatment was on counter-conditioning, that is, "unlearning" the response. The assumption is made that some positive, socially acceptable behavior will replace the "unlearned" negative behavior. Similarly, other behavior approaches define the target of treatment as the elimination of some particular maladaptive behavior. In aversion therapy, for instance (Rachman, 1965), and implosive therapy (Stampfl & Levis, 1967),

the aim is to rid the individual of problem behaviors. These behavioral approaches have proven to be successful in the treatment of very specific disorders and in removing carefully defined negative behaviors. However, they have not attempted to teach complex social skills. Instead they have defined successful treatment as the absence of negative behaviors, rather than the presence of pro-social, adaptive behaviors. The only obvious exception to this is the building of competing-responses hierarchies in the operant approach, where the aim of treatment is both the elimination of maladaptive behaviors and the acquisition of appropriate responses through the use of reinforcement. The difficulty with this approach is that it demands considerable control over the environment. Thus, the use of such an approach in the public schools is not usually feasable or practical.

Recognition of the inadequacies of the various behavioral approaches has led to an emphasis on the development of socially adaptive behaviors, as opposed to the elimination of negative behaviors. In the "response acquisition approach" as McFall and Twentyman (1973) have described it, "The therapeutic objective is to provide patients with direct training in precisely those skills lacking in their response repertoires. Very little attention is given to eliminating existing maladaptive behaviors; instead, it is assumed that, as skillful, adaptive responses are acquired, rehearsed, and reinforced, the previous maladaptive responses will disappear" (p. 199).

The practical application of the response acquisition model has been exemplified in the use of behavior rehearsal. Briefly defined, behavior rehearsal involves supervised practice of desired behaviors, (McFall and Marston, 1970; McFall and Lillesand, 1971; McFall and Twentyman, 1973; Twentyman and McFall, 1975). The work of McFall and his colleagues has indicated that this technique can be used successfully with adults in the treatment of many disorders. In particular, behavior rehearsal has been

applied in assertiveness training. The findings in research studies with adults and in adult clinical reports are rather consistently encouraging. The technique itself offers structure and methodology to the treatment process involved in teaching pro-social responses. However, the procedure has received little attention as a technique for changing children's disruptive behaviors in school. Reports of its use with children or adolescents are infrequent and usually of a clinical nature. Of particular interest is the determination of the effectiveness of behavior rehearsal as an intervention with students in the classroom. Therefore, the purpose of the present study is to assess the effect of a behavior rehearsal intervention program on the observed rate of general cooperative behavior of the teacher-nominated problem students. To assess the impact of the intervention program, the following research hypothesis will be tested: Target students will increase in the rate of general cooperative classroom behaviors as a function of the behavior rehearsal intervention program.

CHAPTER II

REVIEW OF THE LITERATURE

The term "behavior rehearsal" was coined by Lazarus (1963, 1964, 1965) as a synonym for roleplaying. "Behavioristic psychodrama" is another phrase currently in use (Wolpe, 1958, Sturm, 1965). The author concurs with Lazarus (1966) that the term "behavior rehearsal" seems preferable because it indicates both the content and the intent of the actual procedure. Lazarus (1966) provided this definition of behavior rehearsal:

> Behavior rehearsal is a specific procedure which aims to replace deficient or inadequate social or interpersonal responses with efficient and effective behavior patterns. The patient achieves this by practicing the desired form of behavior under the direction and supervision of the therapist. (p. 20)

Behavior rehearsal appears to be one of the most promising and yet least studied of the available behavior therapy approaches (Ullmann and Krasner, 1965). It has been used largely with adults to encourage timid individuals to deal more effectively with authoritarian figures.

The client is encouraged to practice the appropriate behavior while the therapist typically acts out the role of the feared individual and demonstrates by his/her responses the advantages of becoming self-assertive. Lazarus (1966) reported what he claimed to be the first "objective" clinical study of behavior rehearsal. He compared it with direct advice and nondirective therapy in training patients to be more assertive. Behavior rehearsal was effective in 86% of its cases, whereas the other approaches were only 44% and 32% effective, respectively.

This first research report of behavior rehearsal has been followed by the appearance of a variety of experimental studies as well as clinical applications in the literature. The technique has primarly been utilized with adults, though a few studies have used children as subjects. The review of the literature which follows will be divided into three sections according to the nature of the study and the subjects used.

Adult Laboratory and Experimental Studies

The most significant contributions to the study of behavior rehearsal in the laboratory setting have been provided by McFall and his colleagues. In the first of a series of research articles, McFall and Marston (1970) acknowledge the findings of Lazarus (1966) as indicative that behavior rehearsal is a potentially effective treatment technique, but an area in need of considerably more controlled research. They have identified several problems encountered in the existing research.

In this article McFall and Marston point out that the behavior rehearsal treatment procedure, as typically described, appears to be "complex, unsystematic, and unstandardized, relative to other behavior therapy techniques" (p. 295). A large variety and combination of treatment variables may be used including: a hierarchical presentation of stimulus situations, operant shaping by the therapist, constructive criticism, roleplaying, role reversal, repeated playbacks of tape-recorded responses, response practice, homework assignments, postural and vocal analysis and training, therapist exhortation and lecturing, modeling, relaxation, and fixed-role or exaggerated-role therapy (McFall and Marston, 1970). The technique of behavior rehearsal is typically applied to behavior classes that lack sufficient definition or specificity. A lack of assertive behavior does not

adequately describe either the stimulus context of the problem, the exact nature of the deficient behaviors, or the specifics of the desired alternative behaviors. It is also difficult to obtain satisfactorily reliable and objective laboratory and/or real-life measures of behaviors typically treated. In the treatment of snake phobia, for example, it is assumed that the presence of the snake in the laboratory is equivalent to the stimulus of a snake's presence outside the laboratory. However, in assertive training using behavior rehearsal, only a facsimile of such a stimulus is available. Often a symbolic test stimulus is chosen for its presumed similarity to the original stimulus.

McFall and Marston suggest that these criticisms demand more rigorous and specific study of behavior rehearsal, which must include the development of a standardized treatment procedure, the application of this procedure to a homogeneous class of problem behaviors, and the development of objective laboratory and natural measures of both the problem behavior and the treatment's effects. Subsequently, they attempted to resolve some of these problems in an efficacy study of behavior rehearsal and assertive training.

Their initial research effort (McFall and Marston, 1970) was aimed at the following specific experimental questions: (1) Is simple rehearsal, alone, sufficient to produce significant and desired changes in the problem behaviors? and (2) What is the therapeutic importance of response feedback, that is, feedback received via the playback of tape-recorded rehearsal responses?

The effectiveness of behavior rehearsal therapy in assertive training, with and without feedback, was compared with that of two central conditions: placebo insight therapy and no therapy. A simplified laboratory analogue was developed to parallel the more complex procedures usually employed in behavior rehearsal. The behavior rehearsal procedure was semi-automated and standardized. Nonassertive subjects were presented with tape-recorded training situations selected to represent common interpersonal encounters requiring assertive behavior. The subjects practiced making overt assertive responses in several training situations, and these practice responses were tape recorded. To test the effect of rehearsal feedback, some subjects listened to replays of their responses while others merely reflected on how they might improve their responses in succeeding practice trials. Behavioral, self-report, and psychophysiological laboratory measures were taken to assess treatment effects. In addition, a novel, in vivo criterion measure of the generalization of training was obtained through a follow-up telephone call from an experimenter posing as a magazine salesman. The students were given a pre-post behavioral role-play test, a number of self-report and satisfaction measures (including the Wolpe-Lazarus Assertive Scale, the Taylor Manifest Anxiety Scale and the Wolpe-Lang Fear Survey Scale) as well as the telephone follow-up. There were four conditions: behavior rehearsal with performance feedback, behavior rehearsal without feedback, placebo insight therapy, and no-treatment waiting list. Based upon the outcomes of the behavioral role-play test, the two treatment groups were more effective in enhancing assertive behaviors than either of the

two control groups, but the treatment groups did not differ significantly from each other. There was a trend for the rehearsal plus feedback group to attain the overall highest raw scores on all measures, but these differences were not statistically significant. Five performance measures were taken for the telephone follow-up and only one of these (resistance time) yielded a significant difference between treatment and control groups. The lack of substantial group differences in response to the telephone follow-up led to questions about the transfer of training from the laboratory to real life.

McFall and Marston describe their approach to experimentation as a "constructive strategy" in which the most fundamental or theoretically significant treatment component is isolated and its effects on behavior assessed. Then, building on this base, new treatment components are systematically added in order to determine whether they significantly enhance the treatment effects, and only the effective components are retained.

In a subsequent study, McFall and Lillesand (1971) utilized this "constructive strategy", adding two new treatment components, symbolic modeling and therapist coaching, to the rehearsal-with-feedback procedure (p. 313). This was done because the components of modeling and coaching have been described as having a major role both theoretically and clinically in behavior rehearsal therapy (Baundura, 1969; Kelly, 1955; Wolpe, 1969). Furthermore, it appears that they can be of therapeutic value in treatments similar to behavior rehearsal.

Specifically, this study employed heterogeneous, symbolic, verbal models, with no consequences following the modeled responses. The coaching

involved prerecorded, explicit descriptions of what constitutes an appropriately assertive response in each training situation. Nonassertive subjects were screened and randomly assigned to one of three treatment conditions: overt rehearsal with modeling and coaching, covert rehearsal with modeling and coaching, or assessment-placebo controls. Overt procedures are often employed in clinical applications of behavior rehearsal, but covert procedures are now common among other behavior modification techniques such as systematic desensitization. Both strategies offer distinct advantages. Overt procedures not only permit the therapist to monitor subjects' responses during training, but also presumably foster transfer of training. On the other hand, covert procedures often may be less threatening, more flexible and more economical to arrange than overt procedures. Covert procedures may be more effective in treating complex or cognitive problems as well (Bandura, 1969).

Students were trained specifically to refuse unreasonable requests through behavior rehearsals taken from the Conflict Resolution Inventory, the paper-and-pencil screening device used in selecting participants. Several dependent measures were taken, including the pre-post Conflict Resolution Inventory (CRI), the behavioral role-playing assessment task, and the extended interaction test (a prerecorded antagonist making an unreasonable request over a five-minute period and requiring the student to refuse five times).

Findings on the CRI and the behavioral role-play assessment indicated that the treatment groups improved significantly more than the placebo

control groups in assertive behaviors. There was a tendency for the covert group to show more improvement than the overt group. A post-treatment follow-up behavioral test was conducted during final exams. A female confederate, who was an experienced telephone salesperson, telephoned each subject and told them that she was the chairperson of a student committee involved in a mail campaign aimed at saving the campus bus system, and she asked each subject if s/he would volunteer to stuff envelopes for several hours. The woman persisted until either the subject acquiesced or refused five times. On the post-treatment behavioral test, the treatment groups were significantly better than the control group, but treatment groups did not differ from each other. Transcripts of tape-recorded telephone follow-up showed both treatment groups to be significantly better at refusing unreasonable requests than the controls. The authors point out that the overt groups may have been inhibited by hearing playbacks of their tape-recorded practice sessions. In essence they may have been avoiding the negative response of refusing, after hearing themselves doing so.

One of the serious problems in interpreting these results is the fact that significant differences were found in the groups' performances on the behavioral role-playing assessment prior to treatment. Nonetheless, the experimenters used these pre-post scores in the analysis of treatment effects. The inclusion of these data make their findings questionable, particularly in the differences found between covert and overt groups. In addition, some items from the CRI and the behavioral role-playing assessment were used in the actual assertiveness training program. The direct

experience with these items prior to training surely affected the student's responses during training. The use of these same items in the posttest analysis confuses the data interpretation even more. By the time students participated in the behavioral role-play posttest they had already had several opportunities to rehearse those specific assertive behaviors. The students may have simply learned to respond in a situation-specific manner according to experimenter's expectations. The truest measure of response generalization probably was the telephone follow-up. However, the follow-up telephone call did not result in clear-cut significant group differences. Thus, it cannot be assumed that generalization of training had occurred.

Another flaw in this study can be seen in the use of combined modeling plus coaching with behavior rehearsal. In previous writing McFall and Marston (1970) criticized existing research in role-play and behavior rehearsal for the inclusion of several treatment techniques simultaneously. They suggested adding treatment components systematically, yet in McFall and Lillesand's research both coaching and modeling were included. It is impossible to determine the effects of either of these components independently.

McFall and Twentyman (1973) reported four more definitive studies in the area of behavioral rehearsal. In the first experiment the strategy was to dismantle systematically McFall and Lillesand's (1971) treatment effects. The use of prerecorded tapes practically eliminated the possibility that any group differences would arise as a function of therapist bias or expectancy. To further control therapist effects, all experimental treatments were administered by a team of naive, relatively untrained

undergraduate students.

The following six treatment conditions were examined in this study: (1) rehearsal, modeling and coaching; (2) rehearsal and modeling; (3) rehearsal and coaching; (4) rehearsal only; (5) modeling and coaching; and (6) assessment control (no rehearsal, no modeling and no coaching). The full training sequence for each stimulus situation was as follows: (1) the experimenter described a situation; (2) the subject responded covertly; (3) the subject heard the assertive responses from one male model and one female model; (4) the experimenter coached the subject regarding what constitutes an effective response; (5) the situation was repeated; and (6) the subject covertly rehearsed responding again. Of course, depending on the subject's treatment condition, some parts of the training sequence may have been deleted.

Two paper-and-pencil measures (CRI), the behavioral role-playing assertion test, the extended interaction test, and one follow-up behavioral measure were taken. The general attitude self-report measures did not show differences between control and treatment groups. In contrast to the general attitude self-report measure, the Conflict Resolution Inventory assertion scores showed significant treatment effects. Tests for the relative contribution of rehearsal, modeling and coaching to the changes in the Conflict Resolution Inventory assertion scores revealed that coaching was highly significant ($p < .001$), as was rehearsal ($p < .01$), while the modeling component surprisingly accounted for almost none of the treatment variances. The components of rehearsal and coaching both contributed to improvement, and their effects seem to be additive. Results from the extended interaction test (a prerecorded antagonist making an unreasonable

request) indicated that the five treatment groups did not differ significantly from each other but were superior to the control groups in their refusal. No clear-cut pattern of results was obtained on the telephone follow-up measure. The telephone call consisted of the request for assistance in saving the campus bus service and was conducted one month after the completion of training. The group receiving the rehearsal and coaching had the highest percentage of subjects refusing (58%), but this was not significantly different from the other treatment group's rates (38% and 42%). The authors concluded that the telephone follow-up was inadequate, since many of the subjects reported that they agreed to the confederate caller's request because it sounded like a reasonable and worthwhile cause that did not require an assertive-refusal response. However, the authors also suggested that these follow-up findings raised serious questions about the transfer or generalizability of the observed treatment effects.

In Experiment II, McFall and Twentyman sought to (1) replicate the previous unexpected finding with regard to the role of modeling in the assertion-training program, (2) investigate several of the alternative explanations for the failure to demonstrate the generalization of training, and (3) provide validity data for the experimental measures (Conflict Resolution Inventory and Behavioral Roleplaying Assertion Test).

Nonassertive college students were screened and randomly assigned to one of three treatment conditions: (1) covert rehearsal, modeling and coaching; (2) covert rehearsal and coaching; and (3) covert rehearsal only. Because this study was an analysis of the relative improvements associated with different combinations of treatment components, rather than being a

test of the efficacy of the treatments, the research design did not include a no-treatment control group. However, a control group of highly assertive subjects was included, to provide an anchor point of competence on the dependent measures and to permit a test of the validity of the two experimental measures. Two telephone follow-ups were conducted. The first was a replication of the save-the-buses telephone call used in Experiment I, and the second was the female magazine salesperson trying to get subjects to agree to a specific appointment with her.

Again, modeling appeared to contribute little or nothing to the effects of rehearsal and coaching. Generalization of training was assessed in the laboratory setting by presenting students with Behavioral Roleplaying Assertion Test items for which they had received no previous exposure or training. No differences between treatment groups were obtained except for the rehearsal only group, where assertive performance was poorer than with the other groups. Two telephone call follow-up tests were conducted. On the second phone follow-up 71% of the subjects in the rehearsal, modeling and coaching group, 61% of the rehearsal and coaching group and 68% of the rehearsal only group were able to refuse the antagonist's persistent requests. The authors conclude that these findings lend support to the notion that the assertive training generalized to unrehearsed situations and that the rehearsal plus coaching treatment was effective in producing generalization, while the modeling component added little to the treatment effects. Generally, there were no significant differences found among the three treatment groups.

However, the use of the term "generalization" in this context is misleading. In this experiment students responded assertively to role-play test situations which they had not rehearsed previously. Nonetheless, they

were still within the confines of the laboratory situation, and, they may have been responding assertively in accordance with what they belived to be the experimenter's expectations. Again, the telephone follow-up revealed no significant difference between the super-assertive controls and the non-assertive students. The failure to produce a significant transfer of learning to in vivo situations remains a major failing of this research.

Previous research has revealed that subjects are more likely to imitate a model whose behavior is closer to their own than a model whose behavior is highly competent or more extreme (Bandura, Brusec, & Menlove, 1967; Kanfer & Duerfeldt, 1967). McFall and Twentyman suggested that perhaps the models employed in Experiments I and II were too competent, or somehow too unrealistic for subjects to model suffeciently. Some comments from subjects in these experiments indicated that they felt that the models were too abrupt or rude to imitate. To test for the effects of the type of models employed, Experiment III was conducted. In this study all subjects received standard assertion training, but one-half received the old models used in the first two experiments, while the other half were given a new set of models whose responses were more tactful, more hesitant, and less extreme.

Another aim of this study was to determine if covert rehearsal was truly more effective than overt rehearsal. In the previous experiment by McFall and Lillesand (1971) the investigators found that covert rehearsal tended to be more effective than overt rehearsal with recorded response feedback. However, the results were confounded by the combination of the mode of the response and the use of response feedback.

To test this question, subjects were given three conditions of response rehearsal, all without tape-recorded playback. One-third of the treated subjects rehearsed covertly during two training stimulus situations, while another one-third rehearsed overtly during the two training situations. The remaining subjects rehearsed covertly the first time a training situation was presented and, then, rehearsed overtly the second time. An assessment control group was included. Rehearsals occurred before and after the presentation of the modeling and coaching. In addition to the CRI, students were subjected to a telephone test of refusal behavior. A confederate, posing as a book club salesperson, attempted to get an appointment with each student. Only students who agreed to the appointment were included in this study. The results of the behavioral role-playing assertion test indicated that the previous failure of the modeling component to add to the treatment effects of rehearsal and coaching probably was not a function of the particular characteristics of the models employed. When the playback variable was deleted, the present study found no difference between covert and overt rehearsal. This suggests that the playback probably interferred with successful rehearsal and accounted for the earlier differences. The follow-up telephone measure was identical to the pre-treatment call and failed to show any significant group differences at all. Because the students had initially agreed to an appointment with the book club salesperson, it was suggested that they may have been genuinely interested in the book club. But the repeated failure to demonstrate a generalization of assertiveness in real-life circumstances cannot be overlooked as a major weakness in this research.

In further exploration of the modeling component, McFall and Twentyman conducted a fourth experiment in the assertion-training program. They hypothesized that the brief, one-statement, verbally modeled responses presented via audiotape in this series of experiments "lacked sufficient realism, credibility, or salience to influence the subjects' responses" (McFall and Twentyman, 1973). The authors reasoned that it is possible for filmed or videotaped models to be more influential, presumably because "the visual mode of presentation can convey more information, is more salient, is intrinsically more interesting, and/or enhances the realism of the stimulus situation and modeled behavior" (McFall and Twentyman, 1973, p. 211). In this, the antagonist-model interactions were extended to include dramatization portrayals of the antagonist's probable reactions to the model's assertion responses. There were three treatment conditions: audio-visually presented assertion training, auditorily presented assertion training, and assessment control.

The findings of this study demonstrated that the addition of the visual component to the assertion training failed to enhance treatment effects in any detectable way. However, for the first time in this series of studies, a follow-up measure revealed statistically significant transfer or generalization of treatment effects. The confederate caller in this instance asked the students to borrow class notes for a course five days prior to the final exam. It may be that the possible consequences of loaning class notes just before the exam played a more important role in this study, perhaps even enhancing the transfer of training.

In a recent research effort, Twentyman and McFall (1975) note that behavior rehearsal has been used as an effective therapeutic treatment for a variety of behavior problems. The purpose of this current experiment was to extend the use of behavioral training beyond assertive training to the treatment of shy, nondating college males. Unlike previous investigators, Twentyman and McFall suggested that nondaters may avoid heterosexual contacts because they lack the necessary interpersonal skills. They also indicate that the problems existing in the research on nondating males are similar to those noted in the behavior rehearsal assertive training. The specific categories of nondating behaviors are not well-defined and experimental measures of criterion have been vague. The experimental treatments invariably have been complex, confounded and poorly controlled. And, finally,the assessment of treatment outcomes has been inadequate, so that it has been impossible to determine generalization of training to real-life situations. The investigators attempted to provide improvements in the research methodology, the selection of subjects, and the assessment procedures.

The training sequence for each of the five situations was as follows: (1) the subject heard a situation described and rehearsed his response covertly; (2) the tape-recorded responses of two competent male models in the same situation were presented; (3) coaching instructions were presented with special attention to the effective aspects of the model's responses; (4) the subject was instructed to think back to his response and to consider how he might improve it; (5) the situation was presented again, and the subject rehearsed responding aloud; (6) a female assistant role-played the

interaction *in vivo* with the subject over an intercom; and (7) the subject was given a chance to repeat the situation if he was not pleased with his response. The training procedure provided subjects with modeling, coaching, and behavior rehearsal. Students were assigned to the behavior rehearsal treatment group or to an assessment control group. Subjects were asked to keep a behavioral diary which was scored in six performance areas. Subjects also rated themselves in a simulated telephone call and in forced social interaction role-plays on their level of anxiety. Pulse rates were taken during the forced social interaction situations in order to determine levels of arousal. Also, two raters observed through a one-way mirror and made ratings of the students' anxiety in the forced interaction role-play situations.

There were two main findings of this study. The results confirmed the hypotheses that shy, nondating males can be differentiated from confident, frequent daters on a number of self-report, autonomic, and overt behavioral measures. In particular, confident subjects reported feeling less anxious than the shy subjects when telephoning for a date and in face-to-face interaction with a female. They also showed less autonomic arousal (i.e., lower pulse rate) in face-to-face interactions. Raters perceived the confident subjects as being less anxious in their social interactions in the behavioral role-play than the shy males. In general, the assessment procedures of this study were validated.

The other major finding was that three training sessions significantly improved the heterosexual performance of shy males on many experimental measures. However, in a posttest simulated telephone call, observer

ratings of global and specific anxiety failed to show differences between the treatment and control groups. Likewise, in the forced interaction test (face-to-face role-played conversation with a female) there were no significant group differences on the three dimensions of "skillfulness," "anxiety," and "total time spent in conversation." Twentyman and McFall (1975) suggested that this behavioral training may be a potentially effective approach for use with shy, non-dating males.

These studies by McFall, Twentyman and their colleagues constitute the laboratory studies of behavior rehearsal in assertiveness training which are well designed, where effects are partialled out and where sufficient experimental control is present. Despite the careful consideration given to research methodology, these studies have definite inadequacies which have been discussed throughout the above review. To reiterate, the use of items from the behavioral role-playing test and the Conflict Resolution Inventory as training rehearsals leaves much to be desired. It is impossible to determine if students learned a specific set of responses which could only be elicited in the laboratory situation. This is of particular interest since in vivo behavioral measures rarely showed a significant difference between treatment and control groups. Perhaps observational data would provide a clearer, more definitive profile of the students' behavior before, during and following treatment. Another problem not previously noted is the changing criteria for students' inclusion in the program. The experimenters shifted the raw score cut-off point on the CRI as each study was begun. They also added criteria such as in vivo behavioral interaction tests throughout their research. In effect,

McFall, Twentyman, and their associates violated one of their own criticisms of previous behavior rehearsal research; that subjects had been chosen for assertiveness research based upon differential definitions and changing criteria. Finally, the use of many different dependent measures has tended to yield conflicting results. The most obvious test of treatment effect and generalization, the follow-up telephone call, did not usually support the other experimental measures of showing significant treatment effects. These weaknesses certainly need to be given consideration in future research efforts. They do not negate, however, the enormous contribution to the research of behavior rehearsal, since these efforts serve as the initial groundwork in empirical study of this technique. The remaining studies with adults as subjects either show no significant differences among treatment groups, or are poorly designed and/or controlled.

For example, Lawrence (1970) studied verbal assertion by presenting subjects with social issues during training and then testing their responses on a Social Issue Opinion Test. There were four experimental conditions: behavior rehearsal, logical directive, attention control and no treatment. The behavior rehearsal group was given an assertive training procedure which actually involved modeling and verbal feedback, as well as direct instructions to practice more assertive behavior. The behavior rehearsal group was trained in assertiveness on three social issues which demanded opinions. The experimenter read a discussion of the development and maintenance of nonassertive behavior and described the disadvantages of behaving nonassertively. The same social issue statements which were read to the behavior rehearsal group were also read to the attention control group and

the experimenter paraphrased the subjects' responses.

The findings indicate that, with respect to the social issues for which training was given, all three treatment groups behaved more assertively on the posttests and follow-up than during the pretest. However, when social issues for which no training was given were considered, only the behavior rehearsal and attention control groups responded more assertively on the posttest. During the follow-up only the behavior rehearsal group responded more assertively; the other treatment groups had returned to their pretest performance level of assertiveness. The author concludes that the behavior rehearsal group responded more assertively than all other treatment conditions during the posttest and follow-up sessions to all social issues (Lawrence, 1970).

However, his behavior rehearsal treatment included modeling, feedback and direct instructions to the subjects. Therefore, it is impossible to determine which of these aspects of the treatment were responsible for the differences reported. The treatment of the other groups was comprised of reading passages to them which either praised assertive behavior (attention control) or pointed out the disadvantages of nonassertive behavior (logical directive). Thus, modeling, rehearsal, direct instructions, and feedback were lumped together under one treatment term; behavior rehearsal.

Snyder (1972) presented college female subjects with a contrived "salesman" situation. Following the presentation all subjects were divided into four experimental groups: Role-play; modeling; silent reading (or script) and no treatment. In this study, the role-play conditions consisted of having subjects enact a second situation using predetermined

assertive responses. In the modeling condition subjects listened to an audiotape of another person enacting the second situation which required an assertive response. A repeat of the initial "salesman" situation was administered to assess increases in assertive behavior. There were no significant differences between treatment groups, but all treatment groups improved more than the control group in assertiveness. Four self-report inventories were administered and the results were correlated with behavioral criteria of assertiveness and with the change in level of behavior from the pre- to post-measure. Such uses of self-report measures of a global nature have been criticized by McFall, et al., as inadequate in differentiating effectiveness of treatments.

Again, no significant difference among treatments was found by Aiduk (1972). The technique of behavior rehearsal formed the basis of treatment, with the components of videotape, feedback, and self-evaluation training being added systematically to the treatment for the development of assertive behaviors. The group trained in behavior rehearsal with videotape feedback, and self-evaluation showed the greatest improvement on global self-ratings of assertiveness. However, the differences between this and other treatments did not reach significance.

In an interesting clinical experiment of "appropriate" assertion training, Rimm, Hill, Brown, and Stuart (1974) deliberately selected male subjects who reported a history of expressing anger in an

inappropriate or antisocial manner. The treatment group was trained in a behavior rehearsal in which the subject was asked to act out how he would typically behave in a target situation. This was followed by feedback and modeling (both peer and therapist), and then the subject acted out the situation until he received general approval (social reinforcement) from the group. The experimenters report that the subjects in the treatment group remarkably improved the appropriateness of the assertive responses. However, it is impossible to determine whether this is a result of behavior rehearsal, or the myriad other variables present in the group treatment situation.

Adult Clinical Reports

In clinical settings behavior rehearsal has been used in combination with other behavior therapy techniques with adults in the lessening of anxiety, the treatment of homosexuality, and the development of pro-social behaviors. Piaget and Lazarus (1969) discuss the combination of systematic desensitization and behavior rehearsal for certain clients whose anxiety is increased by behavior rehearsal. In such a procedure the therapist and client carefully construct an anxiety hierarchy, as is done in desensitization. Then the therapist and client reverse roles for the initial presentation of each item, wherein the therapist actually models the desired responses. This continues until the client can perform the behavior rehearsal without experiencing previous intense levels of debilitating anxiety. The authors report a successful case history using this combination of systematic

desensitization therapy and behavior rehearsal.

Two clinical reports of the treatment of homosexuality, using a combination of relaxation, rehearsal, desensitization, covert rehearsal and shaping, were found in the literature (Blitch and Haynes, 1972; Salten and Melville, 1972). While both of these case studies report positive outcomes for the clients, it is not possible to determine which of the many behavior therapy techniques was the key to their success.

Modeling and behavior rehearsal have been used to develop and/or increase social interaction in psychiatric in-patients. In what they called the "structured learning approach", Gutridge, Goldstein, and Hunter (1973) provided psychiatric patients in a state hospital with treatment in order to encourage social interaction. The major components of the treatment were modeling, role-playing, and social reinforcement. The patients were compared to a group which received traditional psychotherapy. Both treatments yielded a significant influence on a number of their dependent measures. They suggest the possibility of a "mutually inhibitory effect" between the psychotherapy and structured learning treatments.

There are several other clinical reports of therapeutic treatment techniques which include various forms of behavior rehearsal (Hedquist & Weinhold, 1970; Rose, 1969; and Suinn, 1973). However, further discussion of clinical applications would provide little new or valuable research information about the treatment. In each case the treatment is ill-defined and confounded, there are no objective measures, and the reports were not intended

to be models for future research efforts. It therefore seems best to turn attention to the use of behavior rehearsal with children.

Child Studies

The use of behavior rehearsal as a treatment technique with children has not received wide attention by either experimenters or clinical workers. However, role-play, a forerunner of behavior rehearsal, has been used extensively as an intervention method with children (Chesler & Fox, 1966). Lippitt and Hubbell (1956), in an extensive review of the literature, noted that role-play has been used to change attitudes, develop spontaneity, improve interpersonal relations and to help individuals with inner conflicts. They defined role-play as "a temporary stepping out of one's own present role to assume the role of another individual, of one's self at another time, of an animal or even of an inanimate object. In assuming another role one tries to feel like, sound like, and behave like the individual or object that one is attempting to portray" (p. 89). More recently, Shaftel and Shaftel (1967) described role-play as an "opportunity to explore through spontaneous (that is, unrehearsed) improvisation and carefully guided discussion, typical group problem situations in which individuals are helped to become sensitive to the feelings of the people involved . . ." (p. 86). Despite the seeming similarity between role-play and behavior rehearsal, there are distinct differences which should be noted. The goal of behavior rehearsal is to provide the person with familiar situations and an opportunity to practice desired behaviors, whereas role-play attempts to explore feelings of others and the individual. In practice they differ, too. Role-play often occurs in

a group with discussion of feelings and thoughts following. It is primarily a clinical and educational method which has not been empirically examined to determine the critical variables and their contribution to its success. Behavior rehearsal has most frequently been conducted with a single individual and has been studied in laboratory as well as in clinical settings to determine its significant components and its effectiveness for specific populations with a particular category of behavior. Because of the differences in intent and application, the author has foregone further discussion of the literature on role-play, instead choosing to review the few existing studies of behavior rehearsal with children.

The earliest located report of behavior rehearsal as a technique in child treatment was in 1965. Gittelman (1965) described the use of desensitization and rehearsal in the group treatment of seven boys ranging from 12 to 14 years of age. In a case study report of one of these boys, Gittelman provided a reinforcement procedure in which the boy was fined points for negative, overtly hostile, impulsive reactions in the groups. The boy subsequently reported considerable improvement in his behavior outside the group, and the story was corroborated by his mother. Obviously, the successful treatment of this child was a result of a combination of numerous behavioral techniques, and cannot be attributed solely to behavior rehearsal.

Two laboratory studies concerning the specific development of "altrustic behavior" by elementary school children were found. In the first of these studies (Rosenhan & White, 1967) the subjects played a bowling game, once in the presence of an adult model, and once in his

absence. Each time the model won gift certificates, he donated one-half of them to a box designated for "the orphans." The results are interesting, but only tangentially relevant to behavior rehearsal research. Of the control subjects who did not observe a model, none contributed to the "charity box" while playing alone. Among the students who observed the model, it was primarily those who contributed in the model's presence who also contributed in his absence. The authors suggest that rehearsal of the response as well as observation was necessary for the "altruistic behavior" to occur. The use of the term "rehearsal" in this context is questionable since the presence of the model is a very significant variable.

In a similar study by White (1972) the elementary school students participated in a bowling game under the condition of guided and unguided rehearsal, where children were told that the experimenter wanted them to give one gift certificate to "the orphans" each time they won two. Children in this condition rehearsed the desired charitable behavior twice in the presence of the experimenter. Some of the subjects required prompting before they contributed their gift certificate to the orphans. Half of the subjects in the guided rehearsal condition played the game alone immediately after rehearsal, while the other half played the game several days later. In the observation-plus-unguided-rehearsal, the subjects observed the experimenter bowling and contributing to the box, but no mention was made that they should contribute, etc. Another group of children participated in an observation condition in which they watched a charitable model and then were either left to play alone or played several days later. The results of this study are complicated, but essentially the author concluded that observation alone was not effective

in eliciting the altruistic behavior of donating while playing the game alone. Providing girls who had observed the model with an opportunity to engage in unrewarded social rehearsal facilitated later contributions of gift certificates and inhibited stealing from the pile of gift certificates which was easily accessible to them. These findings were not replicated when the data for boys were examined.

Only one other study employing behavior rehearsal as a technique with children was located in the literature (Sperber, 1972). It is also the sole example of the use of behavior rehearsal as a technique for improving children's social behavior in the classroom. In an attempt to decrease the frequency of aggressive behaviors of elementary school children, subjects were given one of four treatments: Teacher training in social reinforcement, behavior rehearsal of alternatives by the children, a combination group of both treatments, and a control group. Contrary to the expectations of the experimenter, the teacher-training group proved to be most effective in reducing the frequency of aggressive behavior.

Summary

A careful review of the research and clinical findings in the area of behavior rehearsal has shown that this is an effective method of changing adult behavior, particularly in the development of assertive responses. It has been established that behavior rehearsal can provide promising therapeutic aid for adults. However, studies using children as subjects or clients are so infrequent that it seems impossible to determine the effectiveness of such treatment with this group. The startling lack of reports of clinical applications or clearly defined, controlled experimentation points to the need for this proposed study.

CHAPTER III

PROCEDURES

The primary purpose of this study was to investigate the effectiveness of the Behavior Rehearsal Intervention Program in promoting pro-social skills for pre-adolescent youngsters. The skill acquisition model and the behavior rehearsal technique have typically been used with adult subjects in assertiveness training. The application of this model with children in the development of classroom social skills has been relatively unexplored. To demonstrate the program's effectiveness, six target students who exhibited significant inappropriate or inadequate social behaviors were nominated by their teachers. Three students participated in an initial Placebo-Attention Control Condition followed by the Behavior Rehearsal Intervention Program. The other three students participated in the intervention program without the placebo condition. Two of the students, one from each treatment condition, were begun later than the other four students in order to provide a time-lagged control. The Placebo-Attention Control Condition consisted of listening to tape recordings of old radio shows for 20 minutes twice weekly for two weeks. The intervention program consisted of the presentation of tape-recorded classroom situations and rehearsal of pro-social behaviors. Intervention sessions were conducted twice weekly for four weeks. Each session contained two classroom situations and rehearsals.

The evaluation of the intervention program was conducted through the use of systematic classroom observation. The percent-time of observed

cooperative behavior served as the dependent measure for each individual child. An N of 1 design was employed, and the frequency of cooperative behavior above the median was compared across phases of the study through 2 x 2 chi square tests. In addition, the possibility of a significant reduction in variance across phases was examined through the use of F-max tests.

Subjects

The subjects involved in the study were six male students who were assigned to regular self-contained classrooms of a school in the Indianapolis Public School System. These students were in grades 4 through 6, and were approximately 10 to 13 years of age.

Teachers were told in a general faculty meeting of the availability of a behavioral rehearsal training program for children whom they felt showed significant inappropriate or inadequate social behaviors. Subsequently, a meeting was held with those teachers who expressed an interest in the program and had students they felt could benefit from it.

Following the initial meeting with teachers, each nominated child was informally observed each week by the experimenter in the classroom setting for about 12 weeks. In addition, informal discussions were held with each teacher periodically to determine which children were definitely candidates for the Behavior Rehearsal Intervention Program. A total of 13 children were nominated from four regular classrooms. However, seven of them were eliminated from the treatment program for such reasons as truancy, moving out of the school district, refusal to participate, etc. Thus, two children from the three classrooms were selected for treatment.

Description of Individual Subjects

(Information based on unstructured informal observations and teacher interviews)

Classroom #1: Steve

Steve was a twelve-year-old white boy with a strikingly handsome physical appearance. He was in the sixth grade at the time of this study. He had a maturing muscular build, medium brown hair, brown eyes and fine facial features. In addition to his physical attractiveness he was a relatively bright youngster whose cumulative school record showed I.Q. scores in the normal and bright-normal ranges.

However, his social behavior consistently made him less attractive to school personnel. Steve appeared to be withdrawn when interacting with adults. At times this withdrawal could be interpreted as shyness and at other times he appeared sullen. In the classroom, he was usually seated at the perimeter of the classroom by his own choice. When at his desk he was typically slumped in his chair, with his head hanging down so that his chin almost touched his chest. He rarely made eye contact with his teacher and responded with barely audible monosyllables when addressed by adults. He frowned more than he smiled, seldom participated in class discussion and often refused to answer questions.

His relationships with most of his classmates were strained because he was frequently verbally provocative and occasionally physically aggressive for no apparent reason. Consequently, he had a reputation as a "bully" and a "tough guy" among his peers. He had one obvious friend in his class named Doug, who was also referred by the teacher for inclusion in this intervention program. These two boys presented a perplexing problem to the teacher because they were in continuous interaction with each other;

playing, passing notes, talking, exchanging toys and materials and so forth. In fact, their involvement with each other had become highly salient to the teacher and was almost certain to trigger disapproval and/or disciplinary action. Steve was sent to the office for physical punishment or lectures weekly and had a history of suspensions from school.

Academically Steve's performance was generally poor. His report card grades were typically D's and C's, with numerous failures and few B's. He often did not turn in class assignments and homework and usually did not prepare for tests. Steve's teacher referred him to this intervention program because he would not do classwork, he was frequently out of his seat, he caused disruptions in class, and he was rude and uncooperative with her as well as his peers. She felt that he was capable of better class performance but was uninterested in school work. She was unable to maintain control over his disruptive behavior, and he showed little regard or respect for her as an authority figure. Steve participated in both the Placebo-Attention Control Condition and the Behavior Rehearsal Intervention Program. He was one of the initial subjects (Group A).

Doug

Steve's classmate and best friend, Doug, was an appealing eleven-year-old white boy who was in the fifth grade at the time of this study. He also was a physically attractive youngster with long blond hair, hazel eyes and a quick smile. The I.Q. scores found in his school record indicated that he had above average intelligence.

Doug had an open, outgoing manner which made him a likable child. He seemed anxious for adult approval and frequently sought it. His need

for social contact and individual attention with both adults and peers was obvious in his frequent initiation of conversation. Doug seemed to enjoy telling stories of events which occurred outside of school, and his enthusiasm was apparent when adults responded with interest or approval. His assigned desk was at the back or to the far side of the classroom, but he was frequently out of his seat. He found numerous opportunities to go to the teacher's desk, the pencil sharpener or to Steve's desk. When he was in his seat, he was often preoccupied with himself in fantasy and play with objects. He spent much of his class time tossing his hat in the air, building tents with his coat and desk, toying with paper clips and rubber bands, etc.

Periodically, Doug participated in class discussion and wrote class assignments. However, his performance in class was erratic. His academic work can best be described as mediocre, with report card grades primarily of C's and D's and occasional B's and F's. His need for adult approval, coupled with his expressed fear of being retained in the fifth grade, may have partially accounted for his spotty classroom performance.

Doug's peer relations were not particularly unusual or remarkable. Most of his classmates seemed to like him relatively well, though he harbored an intense dislike for one boy. His close friendship with Steve was a source of difficulty for him since they often collaborated in mischief and were caught. Doug's teacher requested that he take part in the intervention program because of his inconsistent academic performance and specific misbehaviors such as talking and being out of his seat. He had been in trouble with school authorities in the past because of truancy,

but this was not a current problem. He was assigned to the intervention program as one of the time-lagged subjects (Group B).

Classroom #2: Terry

Terry was an eleven-year-old white boy in the fifth grade. He had brown hair, brown eyes and smiled teasingly. He was a nice-looking youngster but was physically unkempt. His cumulative school record revealed I.Q. scores which were average or slightly below.

Terry's school behavior was a persistant and pervasive problem. He was openly hostile to authority and flagrantly refused to obey or follow directions of school personnel. At times Terry's teacher was forced to use physical restraint when he stubbornly refused to comply with teacher commands or classroom rules. He was clever in knowingly harrassing the teacher and seemed to delight in such heckling. Terry was on-task infrequently, and the remainder of the time he spent disrupting class, annoying other students, grabbing supplies from the teacher's desk and running around the room. He was a mocking, taunting child who alienated adults and peers alike. When asked what he liked to do in school, he replied, "Monkey around." This was an apt description of his classroom behavior. Terry sat beside the teacher's desk at the front of the room so that she could better manage his behavior. Despite this he seemed to be endlessly out of his seat. He showed an obvious belligerance toward the teacher and contempt for all rules. After his numerous punishments he acted angry, sullen and uncommunicative.

Other children in the class appeared to dislike Terry, though they occasionally laughed at his attention-getting stunts and misbehavior. He had no obvious class friendships and seemed to be a source of annoyance to his classmates most of the time.

Terry's grades reflected the inordinate amount of time he spent off-task. His marks were quite low because he usually refused to do classwork. School performance did not seem to be a concern of Terry's. However, he demonstrated that he was capable of doing passable work on the occasional papers he completed. Terry's teacher referred him to the intervention program because he was overtly contemptuous of authority and disruptive in the classroom. The rate of his misbehavior demanded time-consuming monitoring and frequent reprimands by the teacher. Terry was assigned to both the placebo and the intervention conditions and was included in the time-lagged group (Group B).

David

David, a ten-year-old black boy in the fourth grade, was one of the smallest children in his class. He had closely cropped black hair and brown eyes. Reports of intelligence testing in his school record showed David to be in the borderline range of intellectual functioning, and achievement tests indicated a second-grade reading level and first-grade math comprehension level.

David's classroom behavior was marked by a fidgity agitation and distractibility which is typically associated with the hyperactivity syndrome. He did not seem capable of concentrating on any task for more than

a few minutes and was unable to follow teacher instructions. David was characteristically inattentive to classroom activity and appeared to live in a world of his own. He spent most of his time daydreaming, looking out the window or drawing pictures and seemed unaware of class discussions or assignments. In fact, he rarely knew what book he was supposed to be using or what classwork had been given. He coped with tests by copying from another child's paper. David did not overtly refuse to work, but rather he simply did not attend to academic work.

Peer relations were especially difficult for David. Most of his classmates ignored him, and he did not seem to have any friends among them. His attempts at positive interaction with other students usually consisted of his going to another child's desk and standing beside it. He rarely initiated conversation with adults or peers. When approached by another child David was often defensive and ready to fight. Despite his small physical stature he sometimes shoved or hit other students in an attempt to gain a response from them. In addition, he complained frequently about other children picking on him.

David's academic work was consistently inadequate. Because of his poor grades and the scores on standardized tests he was recommended for special class placement. However, his mother did not agree to this change. Therefore, David remained in the regular fourth-grade class and received math tutoring as well as individualized instruction with a conference teacher several times a week. His teacher requested that he be involved in the intervention program because he was inattentive in class, did not get along well with peers and seemed to lack social awareness and skills

required for the regular classroom. He was placed in Group A and attended the Behavior Rehearsal Intervention sessions.

Classroom #3: Earl

Earl was the oldest boy to participate in the intervention program. He was thirteen years old, black and in the sixth grade. In comparison to his classmates Earl was larger, more muscular and more physically mature. He was a talented athlete who enjoyed intramural sports. He had short black hair, brown eyes and an agile, strong body. On standardized tests he scored in the average and below-average range.

Earl's interaction with school personnel had a troublesome history of long standing. He made no secret of his intense dislike for school as well as his distaste for authority. He was known for confrontation and a readiness to fight. His reputation was so widespread that a mention of his name in the principal's office or teachers' lounge brought about groans, shaking heads and raised hands. His interactions with his teacher were almost always colored by defiance. Earl refused to do classwork and homework. In fact, the threat of removal from the basketball team was the only reinforcer which motivated him to work. In class he sat idly, talking to classmates, laughing, making faces at the others, etc. When the teacher gave directions or reprimanded him he often became intractable and provocative, forcing a power play between himself and the teacher. Consequently, he was punished incessantly. It was not extraordinary for Earl to be sent to the principal's office several times in a day, and he was suspended approximately every two months. Nonetheless, he had several friends among his classmates, and he appeared to be the leader

of a tightly knit clique. Earl relished a fight and wasted no opportunity to come to the aid of a friend whenever one erupted.

Earl's lack of interest in his school work was evident in his grades which were ordinarily C's, D's and F's. He had been retained in the fourth grade but did not express concern over his failing grades. He appeared bored in the classroom and usually did not attempt to do his work. During class discussions he did not volunteer and often giggled and teased students who were participating. When he attempted to do class work he became frustrated quickly and gave up in disgust. He seemed too preoccupied with cars, boxing, basketball and girls to be bothered with academic work. His teacher was exasperated and frustrated with Earl's incessant noncompliance and hostility. He was referred because of his refusal to obey, overt hostility toward authority figures and his refusal to attempt class work. He attended both the placebo and the intervention sessions and was a subject in the initial treatment group (Group A).

Troy

Troy was a member of the clique to which Earl belonged, and they were good friends. He was in the sixth grade and twelve years old at the time of this study. He was a short, wiry black boy with flashing brown eyes and a big Afro haircut. His brightness was apparent, and results of his I.Q. scores placed him well above average. Achievement test scores indicated that he was reading above his grade level and was performing at grade level in most areas.

Troy sought reassurance and individual attention from adults frequently by asking questions or relating experiences in class. He seemed to need recognition from adults. When he failed to obtain it he alternated between anger and manipulation. At times he talked back to the teacher and was openly rude in front of the class. He argued when told to do something and became belligerent when pressured. There was a sneaky quality in Troy's misbehavior. He would never admit to having broken rules, even when caught in the act. In fact, he typically denied any wrongdoing vehemently and sought ways to manipulate and charm his accuser. Troy was bright enough to know how to win adult's favor and also what limits he could push with different school personnel. He was highly verbal and articulate and used these skills craftily. However, when he discovered that his manipulations had failed he often became arrogant, indignant and enraged.

Troy was not popular with his peers. He was marginally accepted among a particular group of boys who were frequently in trouble. However, he was not usually sought out by them. His strong need for attention and socializing was sometimes met with peer rejection. Consequently, he was highly reliant on his friendship with Earl, who seemed to be the dominant partner in that dyad. Troy made passing and average grades with an occasional failure on his report card. His brightness enabled him to perform well on many class tests, but he frequently did not turn in class and homework assignments. Academic subjects were effortlessly mastered when he attempted them, but too often his inclination was to avoid written work. At times his participation in class discussion was good, while at other

times he ignored these activities and socialized instead. Troy was referred to the intervention program by his teacher who complained about his talking back, making wisecracks, ignoring instructions and attempts at manipulation. He was placed in the first group of subjects (Group A) and was involved in the intervention program but not the Attention-Placebo Control Condition.

Dependent Measures and Instruments

The Socio-Behavioral Interaction System (S.I.S.) was used to record the behavior of the target students in the regular classroom. S.I.S. is a revision by Brownsmith and Eldred (1976) of the Systematic Observation System for the Board of Cooperative Educational Services (BOCES) in New York (Frick, Hasselbring, Perkey, Brown, and Olson, 1974).

S.I.S. is a combination of a category and sign system. This allows for the sequential recording of categories of the problem students, teacher, and peer behavior, in addition to providing for a detailed recording of the specific problem student, teacher and peer behaviors during a 10-minute observation period.

This observation system is capable of coding behavioral categories as follows:

(1) The behavior of the target student;

(2) The activity of the target student;

(3) The movement of the target student;

(4) The peer behavior toward the target student;

(5) The teacher behavior toward the target student.

The system was devised so that the behavior of the select pupil is coded according to the type of interaction (Cooperative/Neutral or Uncooperative), the mode of interaction (Verbal, Physical, Passive, etc.) and the focus of interaction (Adult, Peer, Object or Self). In addition, the sign system includes a listing of typical high frequency and/or salient student behaviors, as well as teacher and peer behaviors toward the target student.

The percentage of time the target pupil was engaged in cooperative/neutral behavior during observation served as the dependent measure for each student. Appendix A contains an overview of the Socio-Behavioral Interaction System.

Observational Data Collection

University students were hired to observe the children's classroom behavior and to code it. They attended two-day weekend training workshops and two practice coding sessions during the following week. After the training and practice sessions coders were paired for the collection of reliability data for two weeks. At the initiation of baseline data collection the coders had reached a mean of 86% agreement in actual classroom observation, which was considered to be sufficient. Another reliability check was conducted *in situ* at the end of data collection and a mean of 90% agreement was found.

Observational data was collected through the use of the Computer-Assisted Teacher Training System (CATTS). Classroom observational data were collected via TOUCH-TONE Telephone hookups which provided direct connection with the digital PDP-12 computer located at the Center for

Innovation in Teaching the Handicapped (CITH), Indiana University. Data were permanently stored at the moment of entry. In addition, a portable data collection system (DATAMYTES) was used supplementally when phone lines were not available. The unit contained a TOUCH-TONE button pad for data entry and a connected cassette tape recorder which records button entries. After data collection the cassette tape is returned to the computer laboratory at CITH, played through the data coupler and stored in the computer.

The same procedure for data collection was used throughout the study. Coders were selected from a pool of nine graduate and undergraduate students and scheduled to observe the six subjects in the regular classroom. Each subject was scheduled to be observed twice daily, four days a week. However, due to innumerable problems, the coders were rarely able to follow this schedule. The students were frequently released from regular class to attend reading group, math class, gym class, lunch, recess, the library, sessions with the conference teacher and counselor, math and reading tutoring, special interest crafts and skills classes, school assemblies, basketball games, field days, field trips, and so forth. In addition, other difficulties arose, such as group standardized testing, absenteeism, suspensions and expulsions, disciplinary trips to the principal's office, and special permission to visit other classrooms and teachers.

In addition to the numerous school-related interferences, there were persistent technical difficulties. The direct telephone connection was frequently inoperable during the first six weeks of the study. The

DATAMYTES were often in need of repair, and thus, highly unreliable. In fact, approximately 70% of the data obtained on these portable systems were lost due to mechanical failure. Based upon the proposed eight observations per week for the thirteen-week duration of this study, each child could potentially have been observed 104 times over 52 days. However, observational data were only obtained for a range of 20 to 35 days, and on many of these days only one observation period was recorded. The total number of observations for each child ranged from 30 to 64. At best, approximately one-half of the proposed observations were available for analysis, and they were collected at irregular intervals.

The students were divided into two groups for the purpose of applying time-lagged sequential treatments. Group A consisted of four students, two per classroom. One student from each classroom was assigned to the Placebo-Attention Control Condition while the other two students were assigned to the Behavior Rehearsal Condition. Baseline data for Group A was collected for four weeks, and then treatment or placebo began.

Group B was made up of two students, one who participated solely in the Behavior Rehearsal Intervention Program and one who was involved in both the Attention-Placebo Control Condition and the Behavior Rehearsal Intervention Program. The major difference between Groups A and B was that baseline data continued to be collected on Group B after the onset of treatment and placebo sessions with Group A.

At the beginning of the fifth week of observations two students in Group A began to participate in the Behavior Rehearsal Intervention Program,

while the remaining two students were involved in the Attention-Placebo Control Condition for two weeks and then participated in the Behavior Rehearsal Intervention Program. During the sixth week of observation one student in Group B was introduced to the Attention-Placebo Control Condition for two weeks. Following the one-week spring vacation both students in Group B took part in the Behavior Rehearsal Intervention Program. Table 1 provides a time schedule of research activities for all students.

Table 1

Time Schedule of Research Activities

Group A - Initial Treatment Subjects									
	Mar. 15	Mar. 22	Mar. 29	Apr. 12	Apr. 19	Apr. 26	May 3	May 10	May 17
Earl	PC	PC	X	BR	BR	BR	BR	M	M
Steve	PC	PC	X	BR	BR	BR	BR	M	M
Troy	BR	BR	BR	BR	M	M	M	M	M
David	BR	BR	BR	BR	M	M	M	M	M

Group B - Time-lagged Treatment Subjects									
Terry	BL	PC	PC	X	BR	BR	BR	BR	M
Doug	BL	BL	BL	BR	BR	BR	M	M	M

Key: PC = Attention Placebo Control
BR = Behavior Rehearsal
BL = Baseline
M = Maintenance
X = Absent

NOTE: All Ss had four weeks of Baseline data collection during the period between February 18 and March 15.

The Behavior Rehearsal Intervention Program

Development of Pro-Social Classroom Behavior Categories

Informal classroom observation and discussions with the three teachers revealed a constellation of pro-social behaviors which were highly salient to the teachers and appeared to be inadequate or nonexistent in the six target students. Generally, conflicts in the classroom arose from peer interactions, teacher-student interaction, and academic off-task behaviors.

In the area of peer interaction, teachers complained about physical aggression, fighting, verbal confrontation and disturbance of other students. These behaviors were disruptive to the class, annoying to the teacher and almost certainly resulted in a verbal reprimand or other disciplinary action. Also in the domain of peer relations was the cooperation or collaboration among students in disobedience or misbehavior. Teachers noted that target students were frequently in trouble for talking and playing with classmates as well as for more elaborate joint scheming to break rules. For example, several of these students were disciplined for smoking out of the classroom, meeting in the restroom, hiding toys or games brought from home, meeting at the pencil sharpener, passing notes, etc.

The category of teacher-student interaction provided a wide range of behaviors upon which teachers commented. Some of these were behaviors which were initiated by the target student and some were student responses to teacher behaviors. One of the most frequent problems mentioned by teachers was the unwillingness or inability of students to follow instructions

or commands. Belligerence and defiance toward teacher authority were commonplace events for most of the target students. Likewise, some students seemed to be unaware or inattentive to teachers' directions. Uncooperative negative responses to reprimands was another topic of concern for teachers. Students' verbal abuse or physical resistance to discipline often led to power struggles and additional punishment. These students rarely apologized for their misconduct or lack of cooperation. Similarly, they did not frequently ask teachers for assistance in academic work, nor did they request permission for activities or privileges. When special permission for extracurricular activities was granted or individual help in schoolwork was given, the students generally failed to acknowledge this with any expression of gratitude or appreciation. Teachers jokingly said that "thank you" was not in these children's vocabulary.

For all target students, general off-task behaviors and subsequent poor academic performance were issues at school. Though most of them were intellectually competent, their production of acceptable classwork was low. There was obvious overlap with this category of behavior and the ones mentioned above. In numerous instances off-task behavior was related to peer interactions, as seen when students were talking or playing during seatwork periods. Off-task behavior dovetailed with such teacher-student interactions as failure to follow teacher instructions. Nonetheless, insufficient academic performance was seen as a problem in its own right and was common to all six target students.

From the comments made by teacher and from classroom observation, three broad areas of classroom behavior were determined: (1) peer

interaction, (2) teacher-pupil interaction, and (3) academic behavior. Within each area specific pro-social behavioral categories were identified as significant factors in classroom conflict. They are summarized below.

Categories of Pro-Social Classroom Behavior

I. Peer Interaction

A. Avoids non-compliant peer interaction

The student actively avoids engaging in classroom behavior with peers which will result in the breaking of known rules, teacher disapproval and/or disciplinary action.

B. Positive problem solving in conflict situations

The student refuses physical confrontation (fighting), avoids physical aggression (shoving in line, etc.) and positively resolves verbal disagreements with peers.

II. Teacher-Student Interaction

A. Responds appropriately and positively to non-academic teacher action

The student accepts teacher reprimand or discipline, apologizes for misconduct or lack of attention to instructions and expresses gratitude or appreciation for teacher assistance or for permission granted.

B. Requests assistance or permission

The student seeks aid with academic work appropriately (raising hand, asking pertinent questions) and asks permission in special circumstances (leaving the room, obtaining supplies, working in groups).

C. Responds appropriately to teacher commands

The student willingly obeys direct individual instructions or orders given by the teacher (getting quiet, sitting down at desk, etc.).

III. Academic Behaviors

A. On-task behavior

The student initiates academic work from general teacher instructions given to the entire class (opening book, getting supplies, answering questions, participating in group discussion, etc.).

Based upon the information obtained from teachers and classroom observation, it was decided that all six target students could benefit from pro-social skills training in the three areas of classroom behavior. Simulated classroom situations were tape-recorded, and specified rehearsals of desired pro-social behaviors were written for each child. The content of each classroom situation was individually tailored to be relevant to the particular child. For instance, the names of the target student, teacher and significant peers were used, and the scripts of the classroom situation were based on actual classroom events. Emphasis was placed on the more significant behavioral inadequacies of the individual child. During the course of the intervention program each child was presented with 16 classroom situations to enact (two per session for four weeks). Two or three categories of pro-social behaviors were selected as highly relevant to each child, and these were emphasized by presenting the child with several classroom situations in those categories. At least one classroom situation for each of the six categories of pro-social behavior was presented to every student.

Because of the overlap in pro-social behavior categories, some of the classroom situations contained rehearsals for two desired behavior outcomes. For example, the child could be expected to say, "I'm sorry I wasn't listening, Mr. Jones. Could you tell me again what the assignment is?" Table 2 shows the desired pro-social behaviors for each classroom situation and each child. Examples of classroom situations for the students are located in Appendix D.

Introduction and General Behavior Rehearsal Instructions

At the beginning of the first session with the experimenter, all students received the same Introduction and Discussion of Classroom Conflicts (see Appendix B). The sequence of the introduction is as follows: (a) the experimenter acknowledged the child's conflicts in school, (b) she asked the child to discuss conflicts and dislikes in school, (c) if there was no response, the experimenter suggested a classroom conflict which had been observed, (d) she questioned the child as to feelings in that conflict situation, (e) the experimenter commented on punishments utilized by the teacher, (f) the student was asked to describe the punishment or negative consequences of the conflicts in class, (g) the student was asked if he would agree to make behavioral changes in order to avoid conflicts.

After the initial introduction and discussion of classroom conflicts, the Attention-Placebo Control students were told that the teacher and the experimenter agreed that the child might enjoy school more if allowed to leave the classroom and do something different. Tape recordings of old radio shows such as "The Lone Ranger", "Amos 'n Andy", and

Table 2

Pro-Social Classroom Behavior Rehearsal Topics

Student	Topic	Single Topic Session	Joint Topic Session
Steve	Asks	1	1
	Nonacademic teacher action	4	3
	Problem solving	1	0
	Non-compliant interaction	3	2
	On-Task	1	2
	Teacher commands	0	4
Doug	Asks	1	1
	Nonacademic teacher action	6	0
	Problem solving	2	0
	Non-compliant interaction	4	1
	On-Task	0	2
	Teacher commands	0	1
Terry	Asks	4	1
	Nonacademic teacher action	1	4
	Problem solving	3	0
	Non-compliant interaction	3	0
	On-Task	1	3
	Teacher commands	2	2
David	Asks	4	3
	Nonacademic teacher action	0	2
	Problem solving	5	0
	Non-compliant interaction	2	0
	On-Task	2	1
	Teacher commands	0	0
Earl	Asks	3	0
	Nonacademic teacher action	2	0
	Problem solving	2	0
	Non-compliant interaction	2	0
	On-Task	2	4
	Teacher commands	1	4
Troy	Asks	2	1
	Nonacademic teacher action	0	0
	Problem solving	3	0
	Non-compliant interaction	4	2
	On-Task	0	1
	Teacher commands	0	3

Key: Asks: Requests assistance or permission
Nonacademic teacher action: Responds appropriately and positively to nonacademic teacher action
Problem solving: Positive problem solving in conflict situation
Non-compliant interaction: actively engaged in peer interaction which usually results in teacher disapproval or disciplinary action
On-Task: On-Task
Teacher commands: Responds appropriately to teacher commands

"Suspense Theatre" were played for each 20-minute Attention-Placebo Control session.

Following the introduction and discussion, those children beginning the Behavior Rehearsal Program were told that the experimenter had some ideas about changing some of the events in school which the child did not like. Then, she explained that the child would probably be trying to do some things he had never done before. The child was told the frequency (twice a week) and the duration (20 minutes) of the sessions and length (four weeks) of the Intervention Program, and the experimenter described the use of the tape recordings of classroom conflict situations. Then, the student was given the General Behavior Rehearsal Instructions (Appendix B) in which he was told to pretend he was in the classroom and the situation was really happening to him. The experimenter instructed the student to talk out loud and show what he would do. (See Appendix B).

At this point the experimenter followed this procedure: (a) the first classroom conflict situation was played, (b) the end of the conflict situation was signaled on the tape by the question, "What should you do?", (c) 30 seconds was allotted for the student to respond, (d) the experimenter recorded the students' response on the Classroom Situation Form (Appendix C), (e) she determined whether the child had performed the predetermined criterion response (Classroom Situation Form), (f) four questions were asked and three coaching options were available on the Classroom Situation Form as needed when the child failed to respond, (g) the tape-recorded situation was repeated, and (h) at the end of the

tape a three- to five-minute discussion ensued on the possible applications in the classroom.

A second tape-recorded classroom situation was played in the same session. Both tape-recorded conflict scenes focused on eliciting a previously determined behavior rehearsal outcome. At the end of each Behavior Rehearsal session the student was told that he had demonstrated an ability to perform the target pro-social behavior, and the experimenter requested that the child practice this behavior in the classroom before the next Behavior Rehearsal session.

For all the remaining Behavior Rehearsal sessions, the instructions began with the words "When I play a tape for you. . ." as indicated in the General Behavior Rehearsal Instructions (Appendix B).

The Classroom Situation Form (Appendix C) was used to record the student's verbal and physical responses to the tape-recorded classroom conflict situation. Included in the form was a written script of the classroom conflict situation, as well as the predetermined desired behavior rehearsal outcomes for the specific classroom conflict situation, and questions with coaching options. All classroom conflict situations used in the intervention sessions were pre-recorded and played to the students on a portable cassette tape recorder. During each intervention session a second cassette tape recorder was used to record all verbal interactions between the student and the experimenter.

In order to determine the effect of the Behavior Rehearsal Intervention Program, the time-series analysis developed by Glass, Willson and Gottman (1975) was initially proposed. However, due to the myriad data

collection problems described above, the data were not sufficient to meet the assumptions of this analysis. According to Gottman (1973), in order to correctly apply this analysis there must be a minimum of 40 days of data collection during which a stable baseline data pattern emerges. The time-series design also assumes that data are collected at regular intervals. In the present study data were obtained at varying irregular time intervals, the number of observations was insufficient and the baseline data pattern proved to be a fluctuating and unstable due to the high level of variance in the students' classroom behavior. A graphic review of the data suggested that a simpler model might be more appropriate for analyzing each student's individual data. Therefore, the 2 x 2 chi square design (Siegel, 1956) was employed for comparison of the percent-time of cooperative behavior across the various phases of the study (baseline, placebo-attention, behavior rehearsal treatment, and maintenance). When no significant difference was found between the baseline and placebo periods, the data from these two phases were combined as one unit, and then used for comparison with the treatment and maintenance phases (Siegel, 1956). Finally the F-max Test for homogeneity of variance was employed (Winer, 1971).

CHAPTER IV

RESULTS

In order to determine the effectiveness of the Behavior Rehearsal Intervention Program, 2 x 2 chi square tests (Siegel, 1956) were employed. The percent-time frequency of cooperative behavior was compared across baseline, placebo, treatment and maintenance phases for each individual student. The total percent-time of cooperative behavior for each observation was obtained by collapsing data across the categories of the S.I.S. observation system. In any day where more than one 10-minute unit of observational data was obtained, the mean percent-time of cooperative behavior was computed.

The results of the chi square tests are mixed. Observational data for four of the students show no significant difference in cooperative behavior among any of the four phases of treatment. However, the data for two students from the same classroom (Steve and Doug) indicate significant differences between the baseline and treatment periods ($\chi^2 = 6.81$, $df = 1$, $p < .01$; $\chi^2 = 5.78$, $df = 1$, $p < .02$ respectively). The results of these 2 x 2 chi square tests are summarized in Tables 3 - 8. When observed frequencies within a cell were quite small, Fisher's Exact Probability Test was applied. However, the results of these analyses did not differ from those found with the 2 x 2 chi square.

The next step in analyzing the results was to examine the level of the variance which had proven troublesome throughout data collection. It was because of the wide range in variability of the student's performance that the time-series analysis was abandoned. The data are presented graphically in Figures 1 - 6 which illustrate the data collected and

point up the high degree of variability within each student's behavior. Thus, it seemed plausible to investigate possible changes in variance across the different phases of the study. The wide diversity in levels of cooperative behavior was not initially anticipated, and therefore, there are no experimental hypotheses regarding shifts in the level of variance. However, since the variance has been shown to be a salient factor in this study, a series of F-max tests were conducted. The results of the F-max tests were similar to those of the chi square tests. For four of the students no significant difference in variance across phases of the treatment was found. Likewise, the same two students for whom significant chi square ratios were found (Steve and Doug), were also shown to have significant F-max ratios. The results of the F-max tests indicate that the level of variance was significantly reduced for these two students across the phases of this study (F-max = 11.88, df = 4, 11; $p < .01$; F-max = 5, 40, df = 3, 24; $p < .01$ respectively). The results of the F-max tests are summarized in Table 9. Figure 7 summarizes the mean percent-time cooperative behavior of each phase for the individual students. Once again, this shows the wide variability in these students' performance. The fact that the analysis of the observational data produced differential results leads to difficulty in summarizing these findings. In essence, the main research hypothesis that the rate of general cooperative classroom behaviors would increase as a function of participation in the Behavior Rehearsal Intervention Program was supported in two cases. However, these results were not replicated for the remaining four students.

Table 3

Steve

Observed Frequencies and 2 x 2 Chi Square Contingency Tables

Observed Frequencies: Number of days that percent-time cooperative behavior fell above or below the overall median.

Percent-time Cooperative Behavior	B	P	T	M	
85+	2	1	8	0	11
84-	4	3	1	2	10
	6	4	9	2	21

Baseline plus Placebo versus Treatment Comparison

	B + P	T
85+	3	8
84-	7	1

$\chi^2 = 6.81^{**}$

Baseline plus Placebo versus Maintenance

	B + P	M
85+	3	0
84-	7	2

$\chi^2 = .25$

B = Baseline
P = Placebo
T = Treatment
M = Maintenance

Figure 1 Steve: Percent-time Cooperative Behavior by Day Number

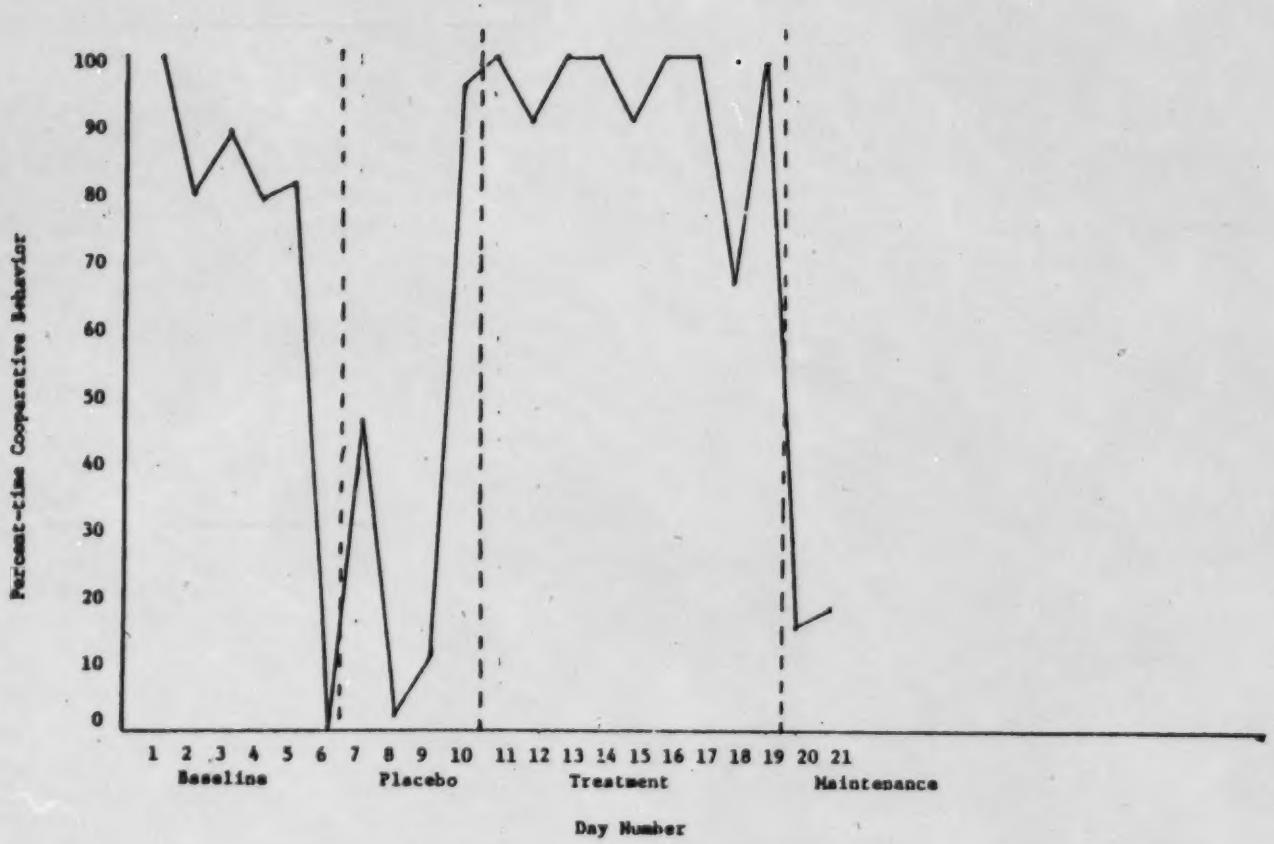


Table 4

Doug

Observed Frequencies and 2 x 2 Chi Square Contingency Tables

Observed Frequencies: Number of days that percent-time cooperative behavior fell above or below the overall median.

Percent-time Cooperative Behavior	B	T	M	
78+	4	9	1	14
77-	9	2	2	13
	13	11	3	27

Baseline versus Treatment Comparison

	B	T
78+	4	9
77-	9	2

$\chi^2 = 5.78^*$

Baseline versus Maintenance

	B	M
78+	4	1
77-	9	2

$\chi^2 = .12$

B = Baseline
T = Treatment
M = Maintenance

Figure 2 Doug: Percent-time cooperative Behavior by Day Number

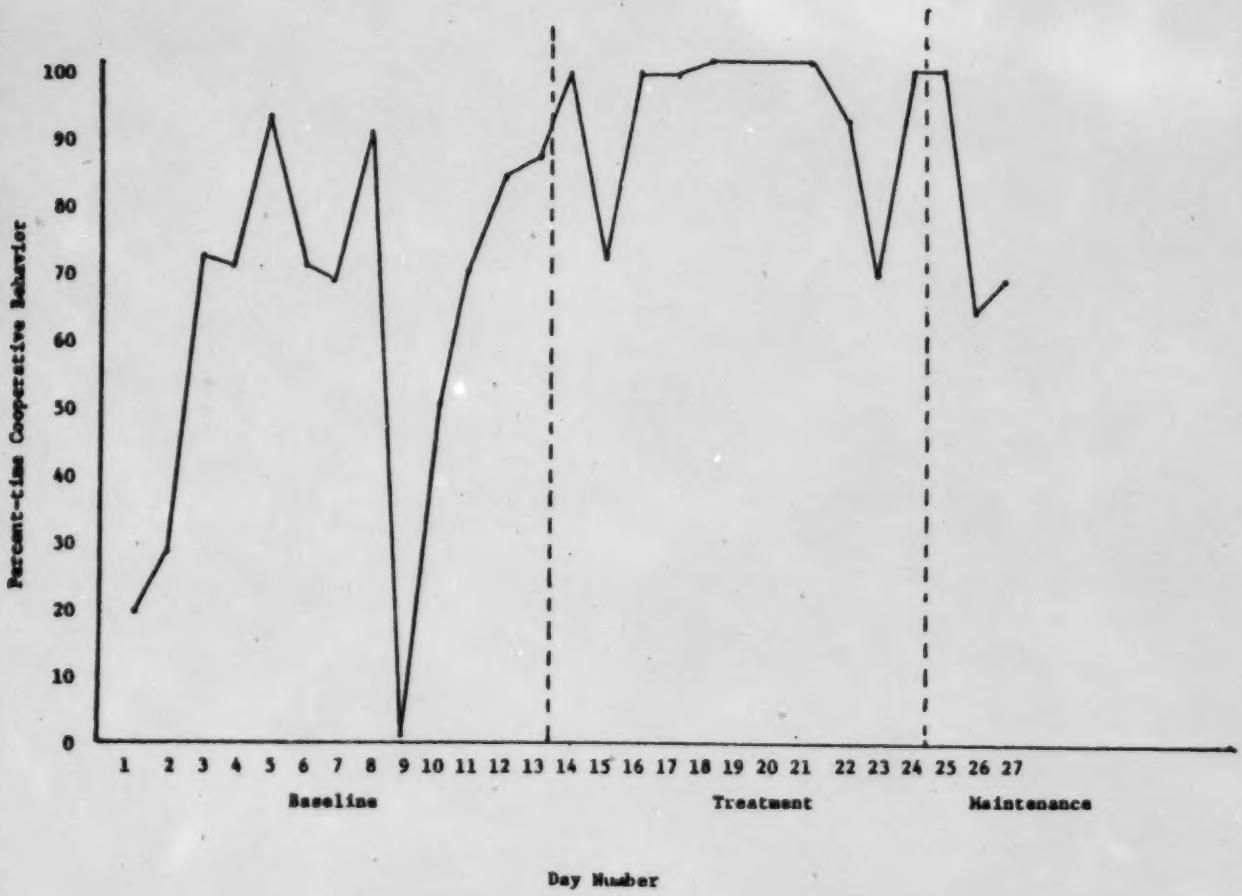


Table 5

Terry

Observed Frequencies and 2 x 2 Chi Square Contingency Tables

Observed Frequencies: Number of days that percent-time cooperative behavior fell above or below overall median.

Percent-time Cooperative Behavior	B	P	T	M	
65+	5	3	6	3	17
64-	6	2	4	3	15
	11	5	10	6	32

Baseline plus Placebo versus Treatment Comparison

	B + P	T
65+	8	6
64-	8	4

$\chi^2 = .01$

Baseline plus Placebo versus Maintenance Comparison

	B + P	M
65+	8	3
64-	8	3

$\chi^2 = 0$

B = Baseline
P = Placebo
T = Treatment
M = Maintenance

Figure 3 Terry: Percent-time Cooperative Behavior by Day Number

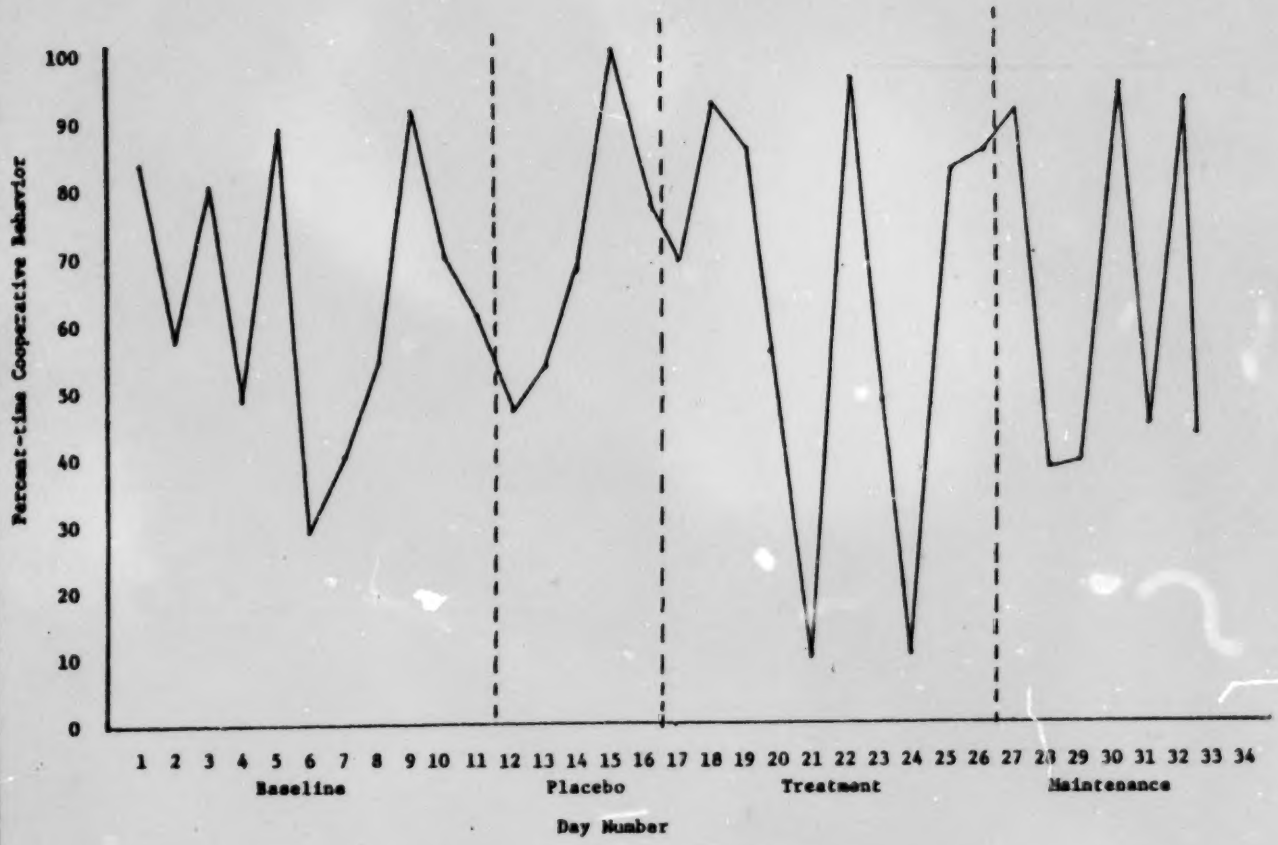


Table 6

David

Observed Frequencies and 2 x 2 Chi Square Contingency Tables

Observed Frequencies: Number of days that percent-time cooperative behavior fell above or below the overall median.

Percent-time Cooperative Behavior	B	T	M	
59+	7	5	5	17
58-	3	5	8	16
	10	10	13	33

Baseline versus Treatment Comparison

	B	T
59+	7	5
58-	3	5

$\chi^2 = .12$

Baseline versus Maintenance Comparison

	B	M
59+	7	5
58-	3	8

$\chi^2 = 1.26$

B = Baseline
T = Treatment
M = Maintenance

Figure 4 David: Percent-time Cooperative Behavior by Day Number

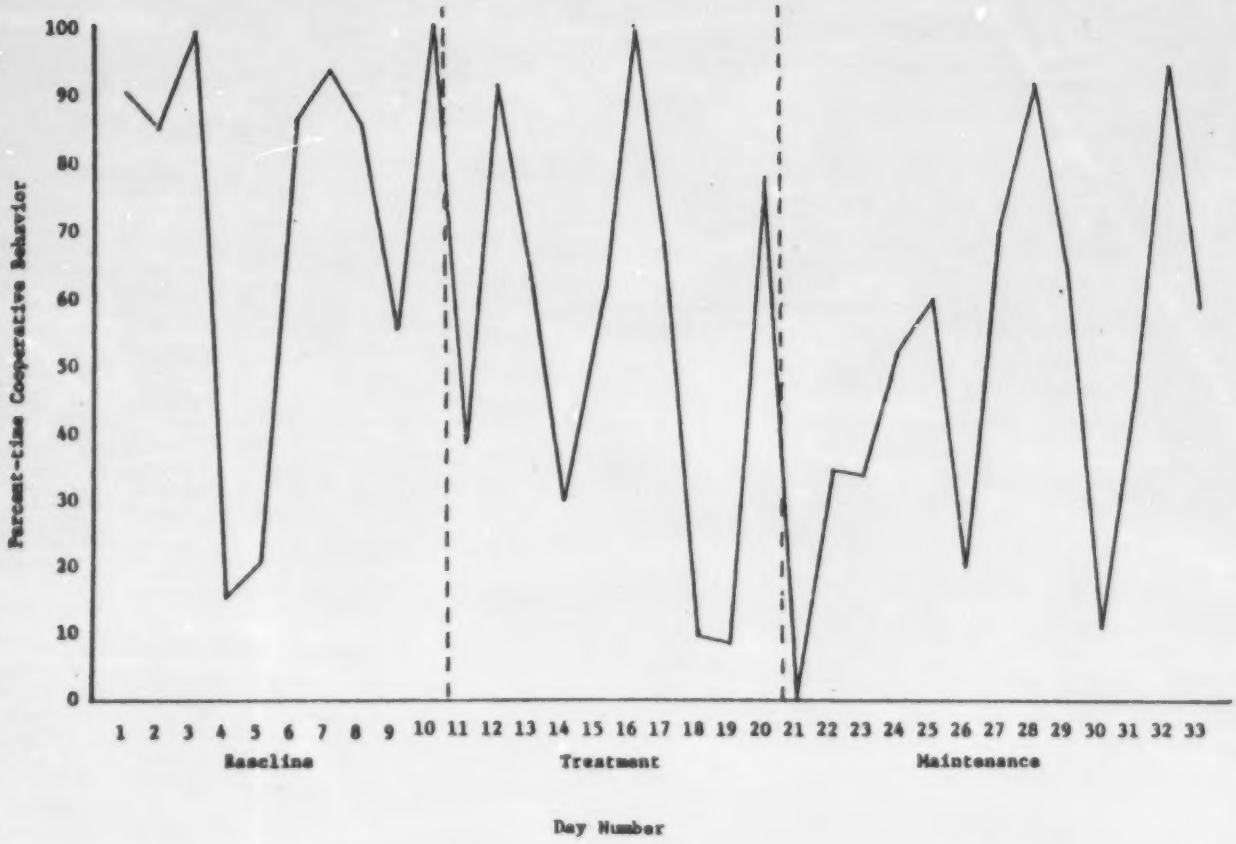


Table 7

Earl

Observed Frequencies and 2 x 2 Chi Square Contingency Tables

Observed Frequencies: Number of days that percent-time cooperative behavior fell above or below the overall median

Percent-time Cooperative Behavior	B	P	T	M	
83+	6	2	6	3	17
82-	7	2	6	3	18
	13	4	12	6	35

Baseline plus Placebo versus Treatment

	B + P	T
83+	8	6
82-	9	6

$\chi^2 = .05$

Baseline plus Placebo versus Maintenance

	B + P	M
83+	8	3
82-	9	3

$\chi^2 = .12$

B = Baseline
P = Placebo
T = Treatment
M = Maintenance

Figure 5 Earl: Percent-time Cooperative Behavior by Day Number

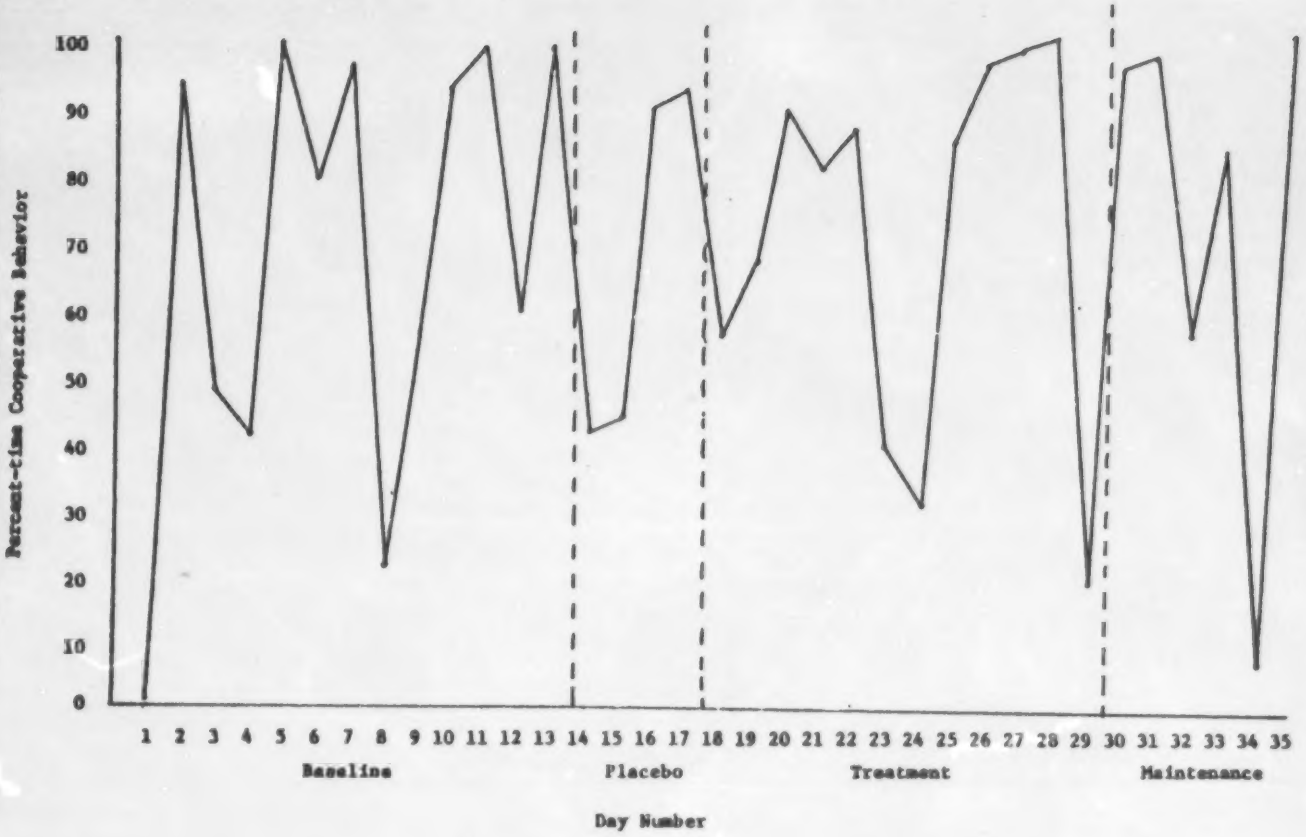


Table 8

Troy

Observed Frequencies and 2 x 2 Chi Square Contingency Tables

Observed Frequencies: Number of days percent-time cooperative behavior fell above or below the overall median.

Percent-time Cooperative Behavior	B	T	M	
89+	3	6	6	15
88-	5	6	8	19
	8	12	14	34

Baseline versus Treatment Comparison

	B	T
89+	3	6
88-	5	6

$\chi^2 = .01$

Baseline versus Maintenance

	B	M
89+	3	6
88-	5	8

$\chi^2 = .04$

B = Baseline
T = Treatment
M = Maintenance

Figure 6 Troy: Percent-time Cooperative Behavior by Day Number

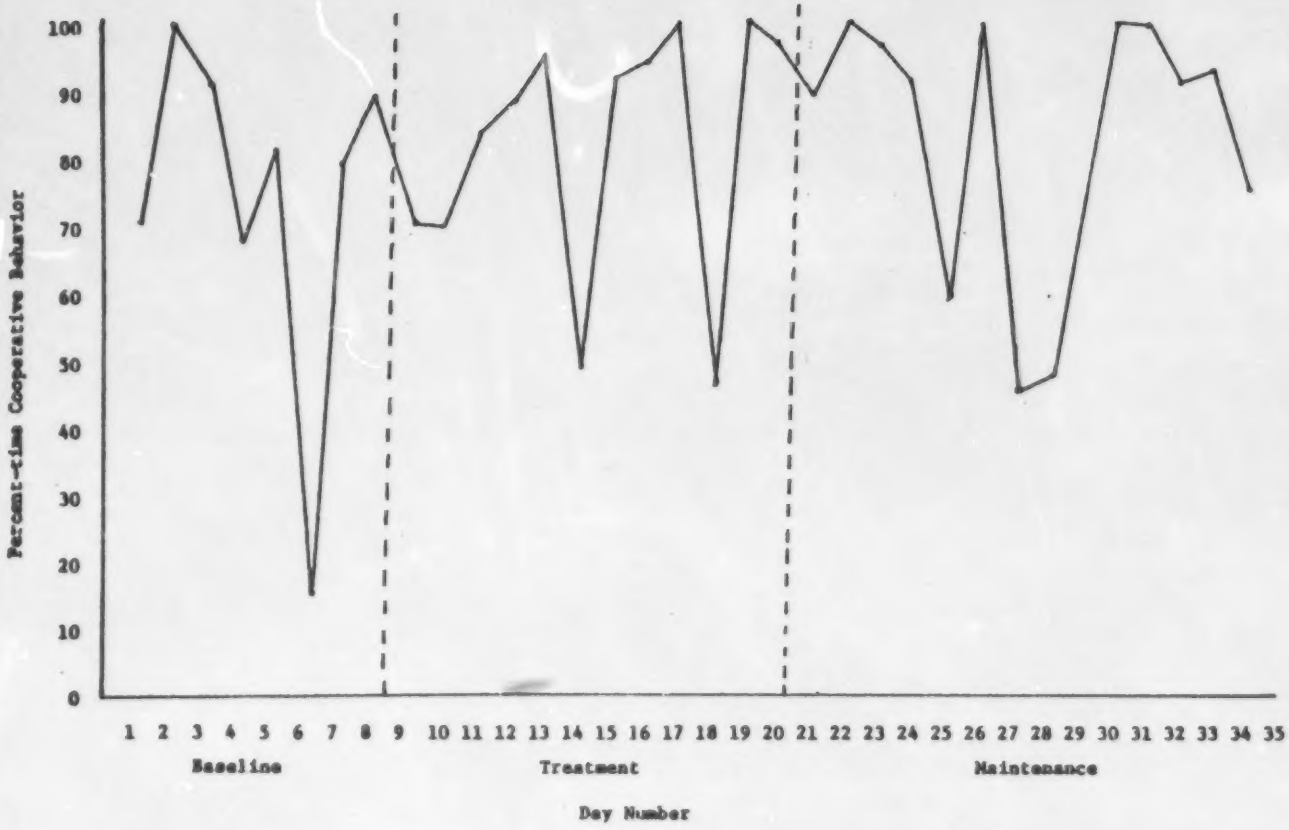


Table 9

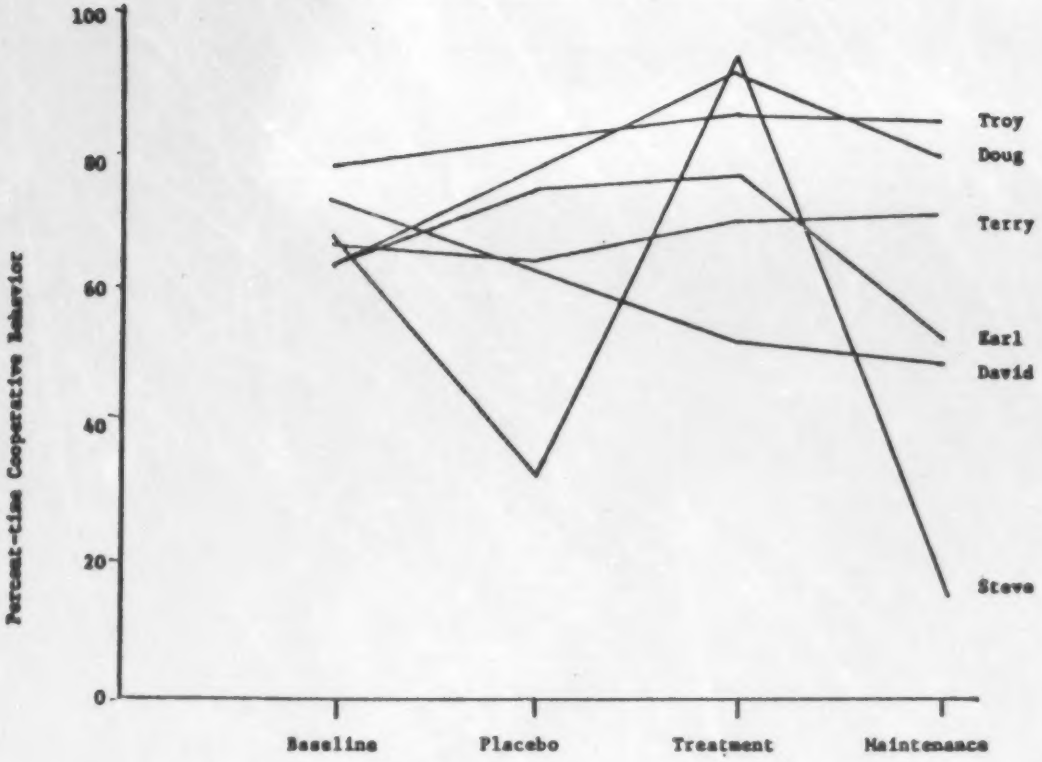
Table of Means, Standard Deviations

and F-Max Ratios

		Baseline	Placebo	Treatment	Maintenance	F-Max
Steve:	$\bar{X}$	69.25	33.67	93.75	16.25	
	SD	35.34	46.12	15.79	13.38	
	N	12	6	16	4	11.88**
Doug:	$\bar{X}$	63.92	-	92.29	80.29	
	SD	32.22	-	13.87	24.34	
	N	25	-	17	7	5.40**
Terry:	$\bar{X}$	66.95	64.38	68.00	69.91	
	SD	30.88	37.67	33.32	33.87	
	N	20	8	19	11	1.49
David:	$\bar{X}$	72.81	-	52.65	44.50	
	SD	31.84	-	38.06	37.06	
	N	16	-	20	22	1.43
Earl:	$\bar{X}$	64.05	74.00	76.68	53.40	
	SD	35.36	31.66	29.22	42.53	
	N	7	19	10		2.12
Troy:	$\bar{X}$	77.44	-	85.28	83.50	
	SD	22.55	-	20.03	22.67	
	N	18	-	18	28	1.28

Figure 7

Mean Cooperative Behavior for Four Phases



CHAPTER V

DISCUSSION

The present study has examined the efficacy of the response acquisition approach to the training of pro-social classroom behaviors with non-compliant, high-risk pre-adolescent boys. Specifically, the effectiveness of behavior rehearsal has been explored in regards to changes in observed levels of cooperative and uncooperative behaviors. Using an N of 1 design, the experiment was replicated for six inner-city adolescent males. Success or failure of this Behavior Rehearsal Intervention Program was measured through the S.I.S. observation system. Percent-time of cooperative behavior per observational period served as the dependent measure for each subject. Results of the analysis of observational data indicate a significant increase in cooperative classroom behaviors during treatment for two students (Steve and Doug). However, these results were not replicated for the remaining four students.

These results present obvious difficulties when attempting to make conclusive statements about the response acquisition model and the behavior rehearsal treatment technique as applied here. Several alternative explanations for these results are immediately apparent: (a) the dependent measure, cooperative behavior, obtained from the S.I.S. category/sign observation system method is too general and subjective, and consequently too insensitive to provide a reliable measure which reflects specific pro-social behavior patterns, (b) the treatment is, in fact,

effective for only certain children with distinctive behavioral attitudes and characteristics or (c) the naturalistic setting provides infinite sources of variance which may interact to obscure the data and cloud treatment of facts. It is plausible that each of these factors may have contributed to the inconsistent findings of this study. Hence, attention will be given to each alternative explanation in turn. Finally, such unexamined factors as social reinforcement and modeling effects will be discussed along with implications for future research in this area.

Needless to say, instruments used in measuring human behavior are fallible, and when these instruments must cope with complex events, these fallibilities become even more obvious (Wieck, 1968). Certainly this has been the case in the present study, as it is doubtful that anyone would dispute the fact that classroom behavior is, indeed, complex. The task undertaken in the S.I.S. observation system is to delineate all behaviors occurring within a given time period as either cooperative (and/or neutral) or uncooperative. At first glance this is a seemingly easy distinction to make. However, what appeared to be simple proved to be deceptively complex during actual data collection.

Cooperative behavior was specifically defined for the observers as following classroom rules and teacher instructions and being on-task. Difficulties arose in determining what the rules were for each classroom and how they differed from one teacher to the next. In informal interviews teachers were asked to list rules which were known to the children

and enforced, as well as student behavior which evoked disciplinary action or disapproval. This information was then given to the observers. After several weeks of baseline data collection, however, the coders complained that the rules were not applied consistently for all students. Some students receive a high frequency of reprimands for behaviors that were ignored or unnoticed in others. In some cases the teachers failed to discipline students who were high achievers or class leaders. On the other hand, one student whose behavior was severely problematic was literally exempt from most classroom rules. In effect, a separate set of standards was applied for him. These discrepancies, coupled with substantive differences in rules from classroom to classroom, added confusion to the coding process.

What was considered cooperative to one teacher was uncooperative to another. For instance, the teacher of Steve and Doug stated that she felt these boys were being uncooperative unless they were on-task or following her class directions exactly. Despite this, observers consistently noted that she seldom attended to off-task behavior unless it was disruptive to the class. The other two teachers were less definite about on-task behavior. Though they indicated a preference and concern that students be on-task, they also acknowledged the impossibility of monitoring this behavior at all times. They said they attempted to provide individual help to the target students when possible but did not usually discipline them for being off-task unless their behavior was disturbing their teaching or other students' classwork. Reports from observers corroborated this. Since poor or erratic academic performance was a central problem for all

six students, an a priori rule was established regarding off-task behavior. Observers were instructed to code as uncooperative those off-task behaviors which occurred when there was a definite written class assignment. The discrimination was more difficult, however, during teacher lectures or class discussions. Here, students were considered to be uncooperative if they actively refused to participate in discussion, failed to recognize when they were being called upon, or when they were overtly involved with an object or another student in activities unrelated to the teacher's stated task.

Another source of difficulty in coding came from the necessity for subjective judgments of cooperative and uncooperative behaviors. A review of the S.I.S. sign system (Appendix A) shows the numerous and varied behaviors which coders were expected to discriminate. Such items as (14) expresses positive feelings, (42) pouts, (29) glares, makes faces, and (17) talks uncooperatively with peers, demanded subjectivity in coding. Likewise, it was often difficult to discriminate whether a child was actually doing class work or doodling, listening attentively or day-dreaming. The level of classroom noise and the position of the coder similarly interfered with the coding of both verbal and nonverbal behaviors, as well as extralinguistic behaviors such as (42) whining.

The limitations noted in the S.I.S. data collection system are, indeed, reflective of systematic observation in general. Category systems have tended to utilize large, general classes of behavior, as seen here with the cooperative/uncooperative dichotomy. Consequently, the

data lack the substantive content and specificity needed to identify critical classroom events. Conversely, sign systems are often comprised of a cumbersome list of specific behaviors. As a result, the amount of material to be kept in mind may be too great (Medley and Mitzel, 1963). In an effort to maximize both the quantity and quality of information, the creators of the S.I.S. combined these two systems.

Unfortunately, in the present study the wealth of potential information from the system could not be maximally examined or utilized. This is true primarily because of the failure to find stabilized patterns of classroom behavior for the target students. As can be seen in the graphic data (Figures 1 - 6), the percentage of time each child spent in cooperative behavior varied from zero percent to 100 percent throughout data collection.

This high level of variance and instability in the data pattern may be an artifact of the observation system or the data collection procedure. The difficulties in defining cooperative and uncooperative behavior probably contributed to the variance, as well as the magnitude of information which coders were expected to record on the sign system. Another factor may have been the irregularity of data collection sessions which was discussed in Chapter III. Wieck (1968) has provided a thoughtful discourse on problems encountered in systematic observation, and several of his comments are relevant to this study. He suggested that the accurate interpretation of nonverbal behaviors such as facial expressions, or verbalizations such as extralinguistic sounds, requires extensive, specific training of coders. Furthermore, many significant behaviors are not recorded

because of the observer's chance response tendencies which stem from imprecise category definitions or inadequate understanding of the category (Wieck, 1968). As a solution to some of these problems he proposes that the behaviors to be observed be carefully selected and defined, and that coders receive explicit instructions regarding each behavior. He also advocates the use of a "directed setting" where the experimenter imposes subtle modification in the naturalistic setting to enhance the occurence of particular behaviors and to omit extraneous sources of variance (Wieck, 1968). Of course, any modification of a natural setting potentially introduces yet another source of variance. Nonetheless, consideration should certainly be given to these suggestions. When properly implemented they could serve to reduce the variance in systematic observational data.

Another explanation for the lack of consistent data patterns and the high level of variability in cooperative behavior is that they may be inherent in the classroom behavior of particular children. No formal observation of other students who were not identified as behavior problems was made. Hence, this study offers no comparative data for "normal" children, those who present no serious management problem for the teachers. However, during the initial conversations with teachers the extreme variability in the target student's academic and social performance was consistently a reason for referral to the intervention program. Teachers were puzzled by unpredictable "mood swings" or "ups and downs" as they referred to them. According to teacher reports the variability in performance dominated the academic aspect of Troy's and Doug's behavior, while it was more prominent in the social and interpersonal sphere for David, Earl, and Terry.

Steve's performance was seen as erratic in both areas. It is plausible that these children were singled out by the teachers as problems primarily because of diverse, changeable behavior patterns rather than the actual severity of their misconduct or poor academic production. Certainly non-compliance and academic inadequacies were important factors in the referral of these children. But perhaps the fundamentally distressing characteristic to the teachers was the extreme fluctuation in behavior. Though this thesis remains unexplored in the present investigation, it is an interesting viewpoint worthy of future study.

The difficulties encountered in the use of the S.I.S. observation system could probably have been circumvented. Extensive coder training and clearer definitions of cooperative and uncooperative behaviors would have certainly helped. In addition, the sign system could have been limited to only those behaviors which could be discriminated as cooperative or uncooperative, including a particular listing of the pro-social classroom behaviors which were designated in the behavior rehearsal scenarios. These changes might have served to reduce the coder's confusion and hence, the degree of variance found in the data. If, however, the extremes in recorded classroom behavior were a direct reflection of the student's behavior patterns and not merely an artifact of the data collection process, then lengthy, extensive observation is needed to clarify those patterns and determine the factors which are significantly related to them.

The second explanation offered for the varied results among the six students is that the Behavior Rehearsal Intervention Program is effective with children who share some common attitudinal and behavioral characteristics. In effect, these results raise the question of an aptitude treatment

interaction. Two students, Steve and Doug, showed a marked increase in the percentage of time spent in cooperative behaviors. This outcome led the experimenter to scrutinize the behavior of each of the students in an informal, clinical manner.

Several characteristics separated Steve and Doug from the other four students who participated in the intervention program. All of the boys were willing participants in the program in the sense that none of them had to be coerced into attending sessions. However, motivations for attending these sessions differed widely among them. Earl, Terry and Troy seemed to be merely relieved to escape the classroom. By agreeing to come to the session they were often excused from class assignments, for example. In particular, Troy and Earl seemed to delight in the individual adult attention, and they also used the sessions as an opportunity to air complaints about their teacher or other school personnel. Though the experimenter actively avoided the encouragement or reinforcement of such complaining, they persisted in occasional negative comments. At times they told stories of being punished unfairly or otherwise mistreated, as if they were tattling on the teacher. Terry did not use the sessions as an opportunity to complain. His response seemed to be relief from the constraints and demands of the classroom. He often used the session as a chance to relate personal events, such as going to a basketball game or fishing. David's response was a unique indifference. It did not seem to matter to him whether he attended the intervention sessions or remained in the classroom. His involvement in both settings was minimal and could best be described as half-hearted. The difficulties described by his teacher in gaining his attention or responsiveness to academic

material were also encountered in the intervention program. While Earl and Troy expressed an impotent rage at what they considered to be unfair treatment by the teacher, neither David or Terry seemed to feel indignant or angry at their teacher. None of these four boys indicated a strong desire to change their classroom behavior. Both Earl and Troy said they didn't think it would "do any good." Their sense of hopelessness and futility was obvious, and, thus, they were not interested in changing their own behavior. Their dislike of their teacher was intense and this was probably related to the fact that the teacher was strict and authoritarian in his response to them. For David, the teacher's approval did not appear to be an important personal issue. His attitude was one of detached uninvolvement. Terry, on the other hand, seemed to derive a sense of pleasure in annoying the teacher. He taunted, teased and was openly rebellious to her.

Doug and Steve were strikingly different in their feelings and attitudes toward their teacher, as well as their participation in the intervention program. Both boys expressed a desire to change their interaction with the teacher because they thought she would, in turn, "be nicer" to them. Doug, in particular, seemed to want the teacher's approval, and Steve simply did not want her to be angry with him as much as she usually was. They also seemed anxious to please the experimenter, an attitude which was not as apparent in the other boys. While the others appeared indifferent or overtly hostile to adult authority, these two seemed to recognize the need to accomodate school personnel. Thus, they responded positively to the behavioral alternatives offered in the intervention.

Furthermore, they were the only two students who committed themselves to practicing these behaviors in the classroom and who reported this to the experimenter. All of these factors were indicative of their motivation to better their relationships with the teacher. Another significant difference was the fact that these two boys described themselves as "best friends." The element of collaboration and peer support cannot be underestimated in considering their success in the program. In short, the factors of motivation, recognition or acceptance of the power structure, and mutual peer reinforcement may prove to be keys to successful intervention in the future.

Any discussion of this study would be incomplete without attention to the problems of observation in naturalistic settings. Even in the most rigorous experimental situations, there are environmental influences which cannot be controlled. Indeed, one of the most discouraging and at the same time challenging aspects of behavioral science is the sensitivity of behavior to a tremendous array of variables (Sidman, 1960). In large group designs, the uncontrolled factors are assumed to affect some subjects in one direction and others in the opposite way. Thus, when data are averaged, the effect of the uncontrolled variables is assumed to algebraically add to zero. However, Sidman (1960) suggests that this assumption of randomness is untested and also highly improbable. Furthermore, the effects of some variables remain for some time after the variable has been withdrawn from the setting. As a possible solution to the problem of unwanted variance, he recommends that subjects be studied on an individual basis in such a way that baselines are relatively insensitive to the influence of

unwanted variables. In other words, instead of trying to manipulate and totally control all extraneous sources of variation, the experimenter should attempt to establish the dominance of the behavior to be studied. In the present study the dominance of the critical behavior pattern was never established. This is due largely in part to the short duration of baseline data collection. It is probable that a longer period of baseline observation would have revealed more stable behavior patterns.

The problem of evoking the behavior to be studied is addressed by Wieck (1968) in his suggestion of directed settings. He discusses the fallacy of viewing settings as equivalent and cautions that care should be taken in selecting a setting. His notion of reducing variance in naturalistic settings is that subtle modifications can be made which do not interfere with the natural event itself, but, instead, enhance the likelihood of its occurence. As previously noted, this position has drawn criticism since it is especially difficult to determine at what point "subtle modification" becomes actual intervention in the naturalistic setting.

Weak behavioral control is an unsettling obstacle for all in situ research, and the present study is no exception. Numerous events impinged on both the data collection process and the intervention program. It was not unusual, for example, to have an observation period interrupted by a fire drill, an announcement over the public address system, or the removal of a student from class by a tutor, conference teacher, nurse, etc. Another perplexing problem was that students frequently came to intervention sessions immediately following major confrontations in the classroom which resulted in physical punishment. Needles to say, at these times the students were in no mood to enthusiastically engage in behavior rehearsals. Control over such obvious sources of interference as these was impossible in this study. And without such control, consideration of finer,

more discrete sources of variation was superfluous. Perhaps some thought should be given to the development of a "laboratory field setting," one in which the cooperation of teachers and the administration could be enlisted to manipulate the classroom environment so that some control could be exercised.

Finally, some deliberation should be given to the content of the classroom situations and the behavior rehearsal technique. It was the experimenter's intent at the outset of this study to abide rigidly to the format of the behavior rehearsal plus coaching model (Appendix D). However, some unforeseen factors entered into the intervention structure. The experimenter consistently utilized praise and other verbal social reinforcements whenever a student competently performed the desired behavior rehearsal. Unfortunately, this aspect was not scripted in the behavior rehearsals, and, therefore, the effects of such praise cannot be determined. A review of the tape recordings of intervention sessions revealed that social reinforcement was applied consistently in all cases where the child successfully completed the rehearsal, so it may be assumed that there was no differential treatment across sessions or among children.

On occasion, the experimenter found it necessary to rely upon modeling where fine discriminations in performance could not be communicated merely through verbal coaching. This was particularly the case in teaching a child to ask questions or apologize to the teacher. Despite the fact that the student might verbally speak the words expected of him in the rehearsal, such critical aspects as tone of voice, body posture and eye contact were difficult to impart without employing modeling. Unlike the factor of social reinforcement, the use of modeling was not applied

consistently. In fact it was used only as a last resort in an attempt to elicit effective performance from a student. The fact that a modeling option was not planned or built into the behavior rehearsal is considered a major weakness in this study. Future research in this area must be planned so that the social reinforcement and modeling techniques are systematically programmed into the intervention model.

The limitations in the present study notwithstanding, the response acquisition model remains a relatively unexplored and potentially effective method of teaching pro-social classroom behaviors to elementary students. Although the general results of this study are mixed, the positive findings for two students suggests that this type of intervention may be a promising tool. Investigation in the areas of student motivation and peer support should provide important information in determining which students can best benefit from such an intervention program and, likewise, in optimizing students' classroom performance. Formal systematic incorporation of social reinforcement and modeling in the intervention would help to clarify the significance of these factors in effective treatment. Likewise, the numerous fallacies noted in the use of systematic observation in a naturalistic setting point to the need for more clearly defined behavioral categories, more extensive and specific coder training and perhaps the use of a directed setting. All of these improvements could potentially reduce the extraordinary variance found in this study.

Problems with the global dependent measure of percent-time of cooperative classroom behavior cannot be overlooked. The present study

undertook to examine numerous pro-social classroom behaviors by collapsing them into one broad category. This was done because it was felt that the students in this study were in need of multiple behavioral changes and increasing one narrowly defined pro-social behavior would not sufficiently alleviate their general classroom interaction problems. The global measure of cooperative behavior was also chosen in the hope that it would reflect a generalization of pro-social skills in the classroom. There may be problems in such broad categorization; the data in this study may well have been more consistent and perhaps more informative if the behaviors to be studied had been more specific. For years behaviorists have been able to demonstrate highly reliable outcomes when measuring discrete behaviors. However, the purpose of this study was to examine general cooperative behavior levels, since it seems that this is precisely the type of dichotomy drawn by teachers in discussing these children's behavior. Therefore, this study attempted to improve young boys' pro-social adaptive skills in a general categorical fashion.

The unique limitations of this investigation make it difficult to come to confident conclusions regarding the utility of behavior rehearsal techniques for fostering adaptive behavior of designated pupils in regular classrooms. Nevertheless, the following suggestions to practitioners and investigators can be derived from this study:

1. Behavior rehearsal can facilitate behavior change for certain disruptive school children.
2. The procedure is successful for only some children and therefore

it must be considered only one tool among many for practitioners.

3. Further research and development might fruitfully investigate methods for obtaining generalization of rehearsed behaviors to the real classroom setting.

REFERENCES

Aiduk, R. A comparison of replication techniques in the modification of nonassertive behavior. Dissertation Abstracts International, 1972, 33, (12-B), 4498.

Bandura, A. Principles of behavior modification, New York: Holt Rinehart, Winston, 1969.

Blitch, J. W. & Haynes, S. N. Multiple behavioral techniques on a case of female homosexuality. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 319-322.

Brownsmith, K. & Eldred, P. Socio-Behavioral Interaction System. Bloomington, Indiana: Center for Innovation in Teaching the Handicapped, in preparation.

Bouffard, D. L. A comparison of response acquisition and desensitization approaches to assertion training. Unpublished Doctoral dissertation, Indiana University, 1973.

Chesler, M. & Fox, R. Role-playing methods in the classroom, Chicago: Science Research Associates, 1966.

Fink, A. H. Teacher-pupil interaction in classes for the emotionally handicapped. Exceptional Children, 1972, 38, 469-474.

Frick, T., Hasselbring, T., Perkey, C., Brown, R. K., & Olson, J. Systematic observation for BOCES: Observers training manual. Bloomington, Indiana: Center for Innovation in Teaching the Handicapped, 1974.

Gittelman, M. Behavior rehearsal as a technique in child treatment. Journal of Child Psychiatry, 1965, 6, 251-255.

Glass, G., Willson, V. L. & Gottman, J. M. Design and analysis of time-series experiments, Boulder, Colorado: Colorado Associated University Press, 1975.

Gottman, J. M. N-of-one and N-of-two research in psychotherapy, Psychological Bulletin, 1973, 80, 93-105.

Graubard, P. S., Rosenberg, H. & Miller, M. B. Student applications of behavior modification to teachers and environments or ecological approaches to social deviancy. Paper presented at the Second Annual Invitational Conference on Behavior Analysis in Education, University of Kansas, Lawrence, Kansas, 1971.

Guskin, S. L., Bartel, N. & MacMillan, D. The perspective of the labeled child. In N. Hobbs (Ed.), Issues in the classification of exceptional children, Jossey-Bass, 1975.

Gutridge, M. E., Goldstein, A. P. & Hunter, G. F. The use of modeling and roleplaying to increase social interaction among a social psychiatric patients. Journal of Consulting and Clinical Psychology, 1973, 40, 408-415.

Hedquist, F. J. & Weinhold, B. K. Behavioral group counseling with socially anxious and unassertive college students. Journal of Counseling Psychology, 1970, 17, 237-242.

Hops, H., Walker, H. M. & Hutton, S. B. Contingencies for learning academic and social skills: Program for acting-out children. Center at Oregon for Research in Behavioral Education of the Handicapped, University of Oregon, Eugene, Oregon, 1973.

Kanfer, F. H. & Duerfeldt, P. H. Learner competence, model competence, and number of observation trials in vicarious learning. Journal of Educational Psychology, 1967, 58, 153-157.

Kelly, G. A. The psychology of personal constructs. New York: Norton, 1955.

Lawrence, P. S. The assessment and modification of assertive behavior. Dissertation Abstracts International, 1970, 31(1-B), 396-397.

Lazarus, A. A. Behavior rehearsal vs. nondirective therapy vs. advice in effecting behavior change. Behaviour Research and Therapy, 1966, 4, 209-212.

Lippitt, R. & Hubbell, A. Roleplaying for personnel and guidance workers: Review of the literature with suggestions for application. Group Psychotherapy, 1956, 9, 89-114.

McFall, R. M. & Lillesand, D. B. Behavior rehearsal with modeling and coaching in assertion training. Journal of Abnormal Psychology, 1971, 77, 313-323.

McFall, R. M. & Marston, A. R. An experimental investigation of behavior rehearsal in assertive training. Journal of Abnormal Psychology, 1970, 76, 295-303.

McFall, R. M. & Twentyman, C. T. Four experiments on the relative contributions of rehearsal, modeling, and coaching to assertion training. Journal of Abnormal Psychology, 1973, 81, 199-218.

Medley, Donald M. & Mitzel, Harold E. Measuring classroom behavior by systematic observation. In N. L. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963, 247-328.

Morse, W. C. The education of socially maladjusted and emotionally disturbed children. In W. M. Cruickshank and G. O. Johnson (Eds.), Education of Exceptional Children and Youth. Englewood Cliffs, N. J.: Prentice-Hall, 1958.

Piaget, G. W. & Lazarus, A. A. The use of rehearsal-desensitization. Psychotherapy: Theory, Research and Practice, 1969, 6, 264-266.

Rachman, S. Aversion therapy: Chemical or electrical? Behavior Research and Therapy, 1965, 2, 289-299.

Redl, F. When we deal with children. Glencoe, Ill.: The Free Press, 1966.

Rhodes, W. C. Psychosocial learning. In E. M. Bower & W. G. Hollister (Eds.), Behavioral science frontiers in education. New York: John Wiley and Sons, 1967.

Rimm, D. C., Hill, G. A., Brown, N. N., & Stuart, J. E. Group-assertive training in treatment of expression of inappropriate anger. Psychological Reports, 1974, 34, 791-798.

Rose, S. A behavioral approach to the group treatment of parents. Social Work, 1969, 14, 21-29.

Rosenhan, D. & White, G. M. Observation and rehearsal as determinants of prosocial behavior. Journal of Personality and Social Psychology, 1967, 5, 424-431.

Salten, L. G. & Melville, C. H. A re-educative approach to homosexual behavior: A case study and treatment recommendations. Psychotherapy: Theory, Research, and Practice, 1972, 9, 166-167.

Saunders, B. T. The effects of the emotionally disturbed child in the public school classroom. Psychology in the Schools, 1971, 8, 23-26.

Shaftel, F. R. & Shaftel, G. Roleplaying for social values. Englewood Cliffs, N. J: Prentice-Hall, 1967.

Sidman, Murray. Tactics of scientific research: Evaluating experimental data in psychology. New York: Basic Books, 1960.

Siegel, Sidney. Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill, 1956.

Snyder, O. W. Assertive training: A comparison of behavior rehearsal, modeling, and silent reading and the relationship of training to selected self-report inventories. Dissertation Abstracts International, 1972, 33, (12-B), 6094.

Sperber, D. F. S. A comparison of two intervention techniques for decreasing aggressive behavior. Dissertation Abstracts International, 1972, 33, (8-B), 3963.

Stampfl, T. G. & Levis, D. J. Essentials of implosive therapy: A learning-theory-based psychodynamic behavioral therapy, Journal of Abnormal Psychology, 1967, 72, 496-503.

Sturm, I. E. The behavioristic aspect of psychodrama. Group Psychotherapy, 1965, 18, 50-64.

Suinn, R. M. Removing emotional obstacles to learning and performance by visuo-motor behavior rehearsal. Behavior Therapy, 1972, 3, 308-310.

Twentyman, C. T. & McFall, R. M. Behavioral training of social skills in shy males. Journal of Consulting & Clinical Psychology, 1975, 43, 384-395.

Ullmann, L. P. & Krasner, L. Case studies in behavior modification. New York: Holt, Rinehart, 1965.

Walker, H. M. & Buckley, N. K. Teacher attention to appropriate and inappropriate classroom behavior: An individual case study. Focus on Exceptional Children, 1973, 5, 5-12.

Walker, H. M., Fiegenbaum, E. & Hops, H. Components analysis and systematic replication of a treatment model for modifying deviant classroom behavior. Report No. 5. Center at Oregon for Research in Behavioral Education of the Handicapped, University of Oregon, Eugene, Oregon, 1971.

White, G. M. Immediate and deferred effects of model observation and guided and unguided rehearsal on donating and stealing. Journal of Personality and Social Psychology, 1972, 21, 139-148.

Wieck, Karl E. Systematic observational methods. In Gardner Lindzey and Elliot Aronson (Eds.), The handbook of social psychology (2nd ed., Volume II). Reading, Massachusetts: Addison-Wesley, 1968, 357-451.

Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1971.

Wolpe, J. Psychotherapy by reciprocal inhibition. Stanford, California: Stanford University Press, 1958.

Wolpe, J. The practice of behavior therapy. New York: Pergamon Press, 1969.

Appendix A

Socio-Behavioral Interaction System (SIS)

Reference Sheets for Observation

January, 1976

Initial Version--NOT FOR DISTRIBUTION

Keith Brownsmith and Penny Eldred

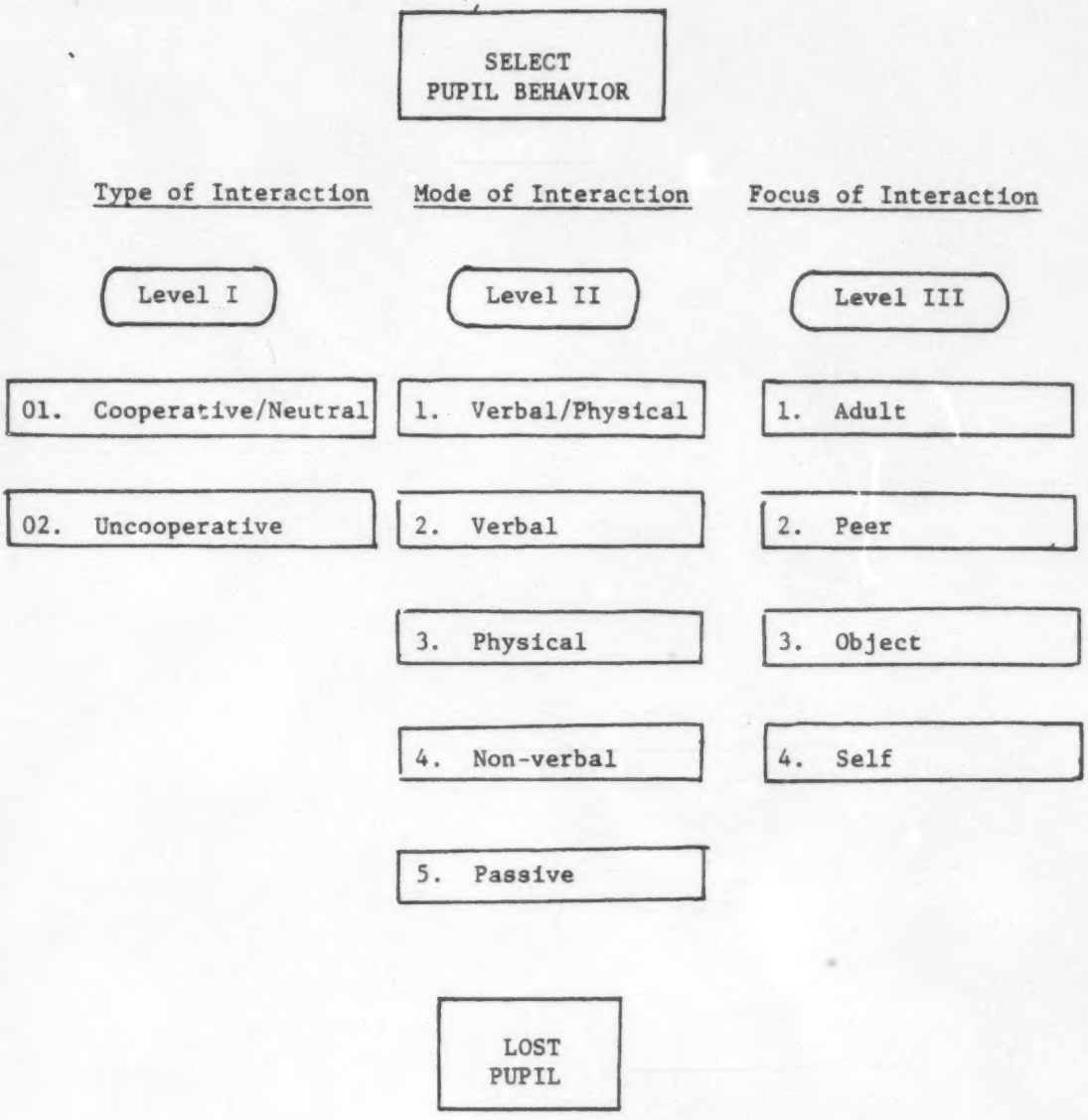
Table of Contents

I. Overview of Category Codes

II. Overview of Sign System Codes

III. Observer Sequence for TOUCH-TONE Telephone

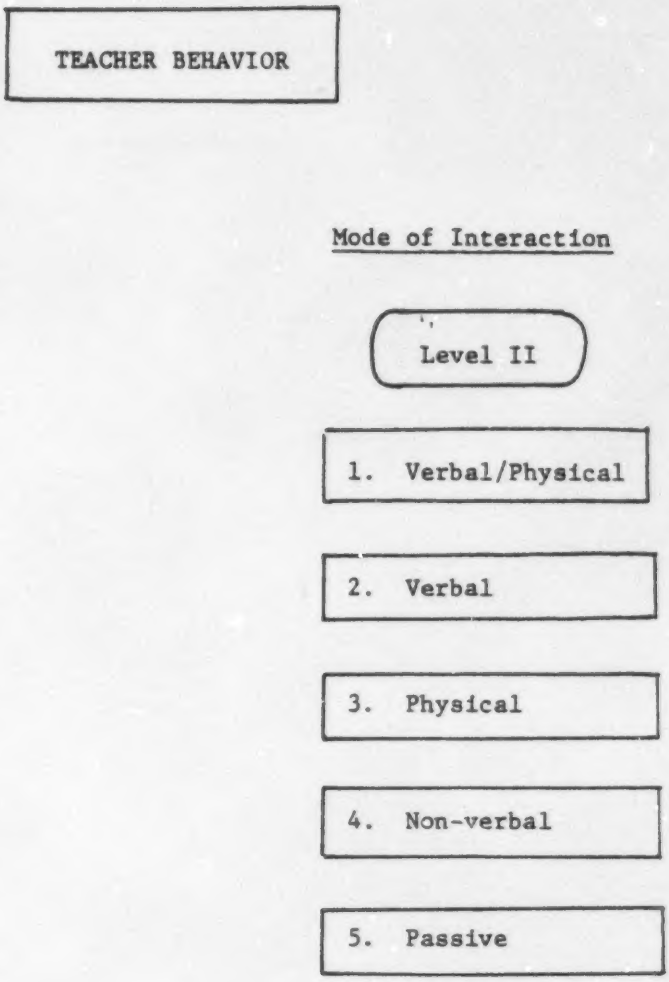
IV. Observer Sequence for DATAMYTE



Identifier

Level 1

08. Lost Pupil


TEACHER BEHAVIOR
Type of Interaction
Level I
03. Approval
04. Neutral
05. Disapproval
Mode of Interaction
Level II
1. Verbal/Physical
2. Verbal
3. Physical
4. Non-verbal
5. Passive

PEER BEHAVIOR

Type of Interaction

Level I

06. Cooperative/Neutral

07. Uncooperative

Mode of Interaction

Level II

1. Verbal/Physical

2. Verbal

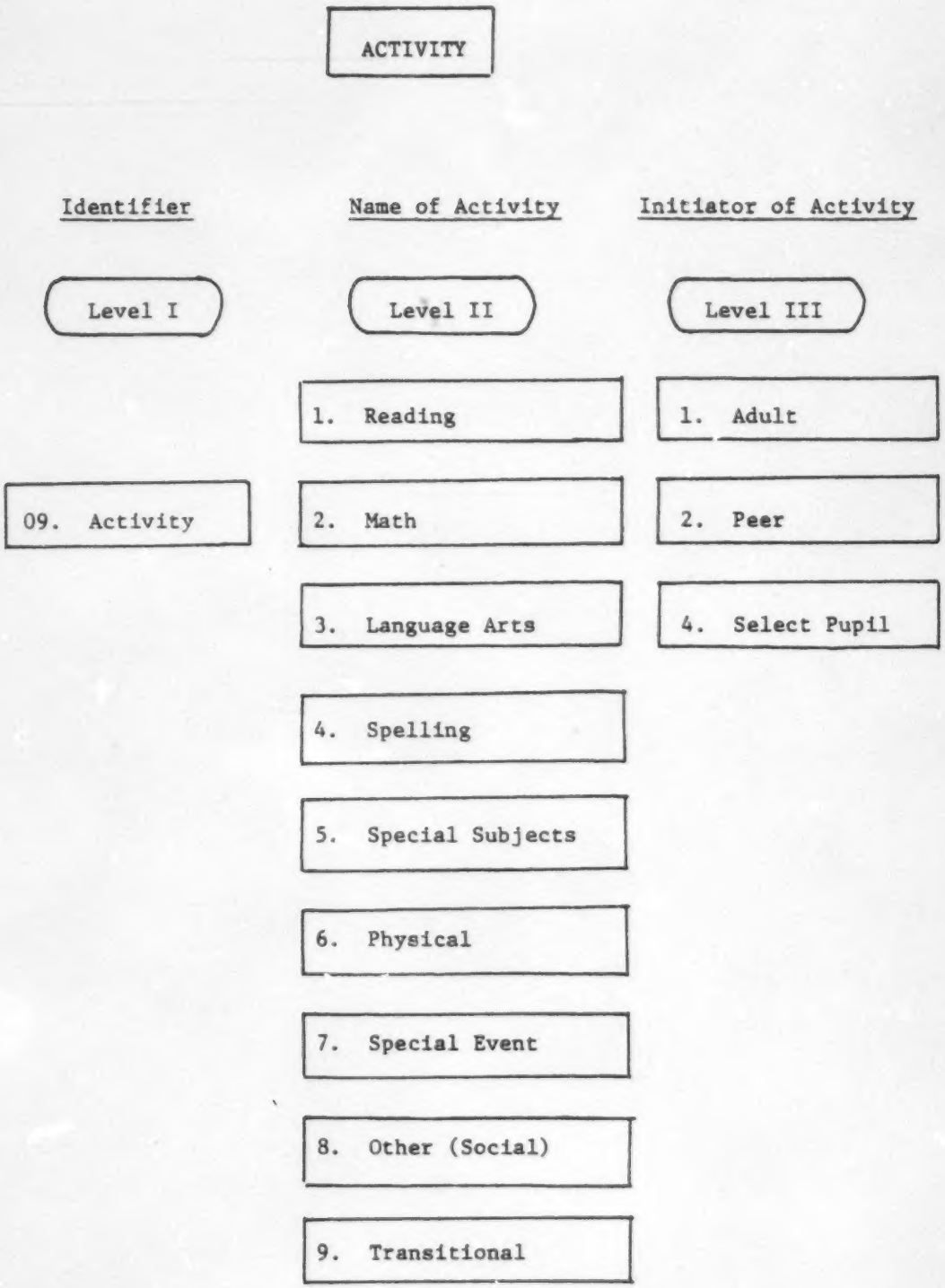
3. Physical

4. Non-verbal

5. Passive

Cooperative/Neutral Passive = Non-Interaction

Both have to be coded.


ACTIVITY
Identifier
Name of Activity
Initiator of Activity
Level I
Level II
Level III
09. Activity
1. Reading
2. Math
3. Language Arts
4. Spelling
5. Special Subjects
6. Physical
7. Special Event
8. Other (Social)
9. Transitional
1. Adult
2. Peer
4. Select Pupil

MOVEMENT

Identifier	Name of Movement
Level I	Level II
10. Movement	1. In seat (body is firmly in the chair)
	2. Stationary (standing by seat or table for special activity, etc.)
	3. Walking
	4. Running

SIGN SYSTEM

A. Target Pupil Behavior

01 Offers to share/shares (adults or peers)
02 Helps others
03 Pats, hugs, touches (either adults or peers)
04 Smiles, laughs
05 Praises others
06 Listens attentively (for one or more minutes)
07 Asks permission
08 Follows teacher's group directions
09 Follows teacher's individual directions
10 Responds cooperatively to feedback from others
11 Works on assigned task
12 Asks teacher questions
13 Justifies own actions/feelings (gives reasons for behavior/feelings/attitude)
14 Positively express feelings (e.g., "I like you.")
15 Negatively expresses feelings (e.g., "I hate you.")
16 Participates in teacher-initiated discussion
17 Talks cooperatively with peers
18 Talks uncooperatively with peers
19 Bolts from classroom
20 Makes noises intentionally
21 Yells, screams
22 Resists teacher's group directions or control efforts
23 Resists teacher's individual directions or control efforts
24 Threatens teacher or peer
25 Criticizes others
26 Blames others
27 Teases others with malice
28 Negatively demands (e.g., "Go away!'; 'Give it back!")
29 Glares, makes faces, frowns, makes negative gestures
30 Damages property (or tries to)
31 Hits, physically abuses others
32 Ignores teacher's group directions or control efforts
33 Ignores teacher's individual directions or control efforts
34 Daydreams, fidgets, wastes time (off-task, in-seat)
35 Wanders around the classroom (off-task, out-of-seat)
36 Takes other's possessions
37 Interrupts other's conversation
38 Interrupts work of others
39 Request help
40 Avoids eye contact with others
41 Hangs head down, looks away
42 Pouts
43 Whines
44 Makes unreasonable demands on teacher's attention (requests instructions repeatedly, etc.)

45 Cries
46 Seeks reassurance/support (peers or adult)
47 Excluded by teacher

B. Teacher Behavior Toward Select Pupil

48 Hugs, pats, touches
49 Smiles, laughs
50 Praises, encourages
51 Attends individually (one or more minutes with select pupil)
52 Redirects, gives corrective feedback
53 Requests help/cooperation (asks student to do something)
54 Promises/contracts (e.g., "If you finish your work, you can have some free time.")
55 Uses humor
56 Ignores the student
57 Asks reasons for actions (asks pupil why he has acted in a certain way)
58 Positively responds to pupil's ideas, feelings
59 Gives tangible reward
60 Justifies own actions (e.g., "I yelled at you because you were making too much noise.")
61 Yells, screams
62 Warns, threatens ("If you do that one more time. . .")
63 Criticizes, blames
64 Teases (malicious)
65 Negatively commands (e.g., "Stop that!" "Don't throw that book!")
66 Frowns, shakes head
67 Hits, hurts, punishes
68 Physically restrains
69 Removes privileges
70 Reminds of rules, norms
71 Rejects ideas, feeling
72 Signals for the student to do something
73 Excludes from activity
74 Does not attend to student

C. Peer Behavior Toward Select Pupil

75 Offers to share/shares
76 Helps student
77 Shows affection by touching
78 Smiles, laughs cooperatively with student
79 Praises pupil
80 Requests help, cooperation
81 Talks cooperatively with target student
82 Talks uncooperatively with target student
83 Justifies own action to student
84 Ignores student

85 Asks permission from student
86 Seeks reassurance, support from student
87 Warns, threatens
88 Criticizes, blames
89 Teases with malice
90 Glares, makes faces at student, makes negative gestures
91 Damages student's property
92 Hits, hurts student
93 Yells, screams at student
94 Pouts, withdraws from student
95 Cries, whines after interacting with student
96 Tattles on student
97 Distracts target student
98 Encourages negative behavior

Observer Sequence for TOUCH-TONE Telephone

Before 1: Get schedules and know where you are supposed to be and at what time. Check in at school office.

Key: * Refers to "Enter" Data
Refers to "Skip" Data

1. Find classroom
2. Plug in phone
3. Dial telephone. You will dial 337-6566 for School #26
   337-7002 for School #27
   337-0405 for School #45
4. Listen for tone on headset to confirm the connection. If no tone is heard, hang up and dial again.
5. Identify sequence
   a. Project: either 1-*, 2-* or 3-*. It is important that this be correct; otherwise data will be improperly analyzed.
   b. Teacher number: (2 digits)-*
   c. Room number: (2 or 3 digits)-*
   d. Student number: (2 digits)-*
   e. School number: (2 digits)-*
   f. Time started: Must be 4 digits, e.g., 0100 or 0200 or 1000-*/

If a mistake is made after hitting the * you must hang up phone and begin sequence again at #3. If mistake occurs before the *, hit # and code numbers again.

6. To start data collection, enter:
   0011-*: Listen for tone and if tone not heard, enter 0011-* again until tone is heard. Collect data for 10 minutes.
7. Code sign system data: Enter 0088-*, listen for tone and if tone not heard, enter 0088-* again until tone is heard. Sign system numbers must be two-digit, so numbers 1 through 9 are coded 01, 02, 03, ...09.
8. a. If this is the last 15-minute session, code 0099-*, listen for tone and hang up. If tone is not heard, dial again.
   b. If this is not the last 15-minute session, go back to #6, enter 0011-* and follow the same procedure.

Remember: the * is the Enter Key and the # is the Skip Key. A mistake made before hitting the * (Enter Key) can be corrected by hitting the # (Skip Key). For a mistake made after hitting the * (Enter Key) check your procedures.

Observer Sequence for DATAMYTE

1. To start a session, when you have located the select pupil, turn the DATAMYTE power on (be sure the red light shines steadily), and enter 5 (five) skips.
2. Rules for button pushes:

   KEY: E = Enter
   S = Skip

   a. IMPORTANT NOTE: You must hesitate 1/2 second after the ENTER key is pushed before pushing any other keys. This key requires more time than the others because a four-digit "clock reading" is stored whenever the ENTER key is struck.
   b. Push the ENTER button after each completed code.
   c. Push the SKIP button to clear erroneous codes.
   d. Buttons should be firmly depressed. Do not peck at the buttons.
   e. Use one finger only.
   f. Never press a new button until the preceding one is released. (This won't be a problem if you remember to use only one finger.)
3. Code LOG-IN DATA - The first data recorded during each session are biographic in nature. They should match the data which are written on the cassetts:
   a. Project: either 1-E, 2-E, or 3-E. It is important that this be correct; otherwise data will be improperly analyzed.
   b. Teacher number: (2 digits)-E
   c. Room number: (2 or 3 digits)-E
   d. Student number: (2 digits)-E
   e. School number: (2 digits)-E
   f. Time started: Must be 4 digit, e.g., 0100 or 0200 or 1000-E.

If a mistake is made after hitting the E, you must re-enter the last line.

If before the E, hit S and code numbers again.

4. Code 0011E TWICE - This code signlas the computer that all of the log-in data has been entered and a new data record is about to begin.
5. Code CATEGORY DATA - After the code 0011E has been entered, the observer should begin observing and coding the category system. Begin with the situational data and then the pupil/teacher categories.
6. After 10 minutes of category coding, it is time to code the signal data. ENTER 0088E TWICE (this signals the computer that the sign data is coming). Then enter the sign system. Remember, each item is coded only once no matter how often it occurred.
7. If the observation period has not expired, return to number 4. If the observation period has expired, code 0099E TWICE. (This signals the computer that the observation period is over.)
8. Enter five skips.

Appendix B

Introduction, Discussion of Classroom Conflicts and General Behavior Rehearsal Instructions

"My name is _____. I am from _____. You have probably seen me in your classroom and around school for several months. You've probably also seen the woman who comes into your class with the telephone or the box with all the buttons on it. She has been sitting in your class, watching how you behave. I've watched you too and I can see some of the problems you are having in school. Can you guess what kinds of problems I'm talking about?"

Pause and allow the child time to respond. If there is no response, continue.

"I've been in your class and sometimes I notice that you don't seem to be very happy in school. Would you tell me some of the things that you don't like about school?"

Pause and allow the child to answer. If s/he does not respond, prompt the child with the following questions:

"What do you dislike about your class? . . . What do you dislike about your teacher?"

If the child doesn't respond, suggest one situation in which you observed the student in conflict and seeming to be upset or angry. In other words, simply describe a classroom scene in which this child has been involved in conflict. Then ask, "Do you remember that?" or "Has anything like that ever happened to you?"

Pause and allow the child to answer. It may be necessary to help the child identify feelings if there is not response by asking questions such as, "Did it make you angry when (specific classroom conflict) happened?" or, "Did it hurt your feelings when (specific classroom conflict)?" or, "You didn't seem to like it very much when (specific classroom conflict)?"

Whether the child agrees or not, proceed to the next step by saying, "I have noticed that you sometimes get into trouble with (teacher). What usually happens when you get into trouble in school?"

Pause and allow the child to answer. If there is no response, prompt the child by asking, "How does (teacher/principal) punish you?" or, "Do you get sent to the office, suspended from school, or do you get licks with the paddle?"

Allow the child to discuss the negative consequences of his/her behavior. Then ask, "You don't like to have those things happen, do you?" Pause for the child to answer. Then say, "Would you like to change things so you did not get into trouble so much?" Pause.

A. For the Attention Placebo Control Condition:

At this point say, "Your teacher (name) and I talked about some of the problems and they thought that you might enjoy school more if you had a chance to leave the classroom and do something different. So let's just enjoy what we're going to do. I would like for you to listen to this tape recording of an old radio show. I think you'll like it, and at the end you can try to remember the parts of the story you liked best."

B. For the Behavior Rehearsal Conditon:

At this point say, "I have a few ideas about ways that you could

change some of the things you don't like that have been happening to you at school. You'll have to try out some things that you probably haven't ever done before. Let me explain, here is what we will be doing. You and I will see each other two days a week. When you come to see me I'll have a tape recorder here and I'll play it. On the tapes I will tell you about things that happen in your classroom all the time. For example, I will tell you things like, ___(teacher's name)___ tells everyone in the class to be quiet, but you don't really want to stop talking.'"

C. General Behavior Rehearsal Instructions:

"When I play a tape for you I want you to try to imagine what is happening. Try to pretend that you are in the classroom and this is really happening to you. Think about how your teacher talks, how the classroom looks. When you hear the tape recorder ask, 'What should you do?' I want you to talk out loud, to say exactly what you would do. Pretend you are in the classroom and talking to the teacher or doing exactly what you would do in class. Do you understand what I am asking you to do?"

Pause and answer any questions the child has about procedures. After all questions have been answered say, "Okay, here's the first classroom situation."

At this point the E follows this procedure: (a) the first tape is played, (b) the end of the classroom situation is signalled on the tape by the question, "What should you do?" (c) 30 seconds is allotted for the student to respond, (d) the E records on the Classroom Situation Forms

(Appendix C) the actual response of the child, (e) the E determines whether the child has performed the criterion response.

Whether or not the student performs an acceptable criterion response, the E asks the following questions:

Question (1a) "Can you guess what the teacher wants you to do?" If necessary, remind the child of the situation s/he has just heard on tape.

(1b) "Could you tell me what you are supposed to do when _____?"

If the child answers the question appropriately, continue with question #2. If the child's response indicates that s/he does not know the classroom rules or expectations of the situation, proceed with coaching.

Coaching (1) Describe the rules or expectations of the classroom situation.

Question (2a) "Do you usually remember to do that?"

or, (2b) "Do you always follow the rules?"

or, (2c) "Do you sometimes do _____ even if you know the teacher doesn't want you to?"

Question (3a) "Do you know what happens if you break those rules?"

or, (3b) "Tell me what the teacher does when you break those rules?"

If the child fails to respond or does not appear to understand the consequences of breaking the rules, proceed to coaching.

Coaching (3) Describe some of the consequences of failing to comply with rules or expectations in the classroom, i.e., punishments, teacher's anger, other children's anger or rejection.

Question (4a) "What can you do so that those things don't happen to you?"

or, (4b) "Can you tell me some of the things you can do so that you don't get into trouble like that?"

If the child cannot or does not answer appropriately, proceed to coaching

Coaching (4) Describe the criterion response and any alternatives which could be acceptable in the situation.

At the end of the questions and coaching, give the situation again and allow the student an opportunity to practice the criterion response again. Then present the second taped classroom situation, following the procedures outlined above.

At the end of the Behavior Rehearsal session, tell the child, "I know you can __(perform target behavior)__ because I've seen you do it here with me. You've shown me that you know how to do it. What I want you to do is practice __(target behavior)__ before I see you again __(time)__. Will you do that?"

Appendix C

Child's Name: _____

Behavorial Rehearsal Session #

Classroom Situation Form

Script of Situation	Criterion Response
Questions	Coaching

Appendix D

Examples of Classroom Situations and Behavior Rehearsal

Interventions for Each Student

Child's Name: Doug

Behavorial Rehearsal Session #3

Classroom Situation Form

Script of Situation	Criterion Response
Now imagine that you've been sitting at your desk, doing your work. Mrs. S. has given the class some math problems to work and you've gotten finished with them. You stop to take a break for a few minutes because you're so tired of working. You put your head down just to rest. Then Mrs. S. starts yelling at you. She's saying "Doug, why aren't you working? Don't you have anything to do? What's the matter with you, are you just lazy? You're just plain lazy. I can't ever get you to work. That's why you make straight F's all the time." What should you do?	1. Say to Mrs. S., "I was just resting for a minute and I'll get my work done now."
Questions	Coaching
1. What is the best thing for you to do?	1. Be polite to Mrs. S. and then get to work. Don't talk back to her.
2. What do you usually do?	
3. What will happen if you talk back to Mrs. S. and argue with her?	3. She'll get angry with you and make you stay in at recess.
4. What could you do so Mrs. S. won't get more upset with you?	

Child's Name: Steve

Behavior Rehearsal Session #3

Classroom Situation Form

Script of Situation	Criterion Response
Okay, Steve, now imagine that you're sitting in class. Mrs. S. is standing at the board, teaching arithmetic. She's putting problems on the board and then calling on someone in the class to come to the board and work the problem. You know how to work them; they're simple multiplication problems. But you don't really like to go up in front of the class and you don't like the way Mrs. S. acts. Still, though, you're sure you can work the problems. What should you do?	1. Raise your hand and go to the board to try to work the problem.
Questions	**Coaching**
1. What do you think Mrs. S. wants you to do?	1. She wants you to come to the board and work the arithmatic problem.
2. What do you usually do?	
3. What would happen if you never volunteered to work in class?	3. Mrs. S. will say that you're lazy and you haven't studied. She'll probably get mad at you or give you bad grades.
4. What can you do so Mrs. S. does not think you're lazy?	

Child's Name: Steve

Behavior Rehearsal Session #8

Classroom Situation Form

Script of Situation	Criterion Response
Now, Steve, let's imagine that you're in your classroom. There is a social studies assignment that you're supposed to be working on. But you're kind of fidgety and tired of working. You get up our of your seat and start wandering around the room. For a while Mrs. S. isn't paying any attention to the class. She's working at her desk and she doesn't even notice that you're out of your seat. But then she looks up and says, "Steve, what are you doing out of your seat? Did you get permission to get up? Why aren't you getting some work done?" What should you do?	1. Tell Mrs. S. that you're sorry, go back to your seat and get busy on your work.
Questions	Coaching
1. What do you think you should do?	1. You should sit down and apologize to Mrs. S.
2. What do you usually do?	
3. What usually happens to you when you get out of your seat without permission and Mrs. S. sees you?	3. If she sees you out of your seat she gets very mad at you. She may punish you or just yell at you.
4. What can you do so Mrs. S. won't be angry anymore?	

Child's Name: Doug

Behavior Rehearsal Session #7

Classroom Situation Form

Script of Situation	Criterion Response
Now, Doug, let's imagine that you're in your classroom. Mrs. S. has gone out of the room for a little while to meet with someone's parents. She left Alma to be the monitor of the class. She's supposed to take down anyone's name who talks while Mrs. S. is gone. The problem with Alma is that she always takes your name down even if you just say a couple of words, but she lets some of her girlfriends get away with talking a lot. She doesn't tell on them. Now she's just sitting there watching everyone. Steve starts to whisper to you from across the room. He's saying, "Hey, Doug, Doug." What should you do?	1. Gesture for Steve to be quiet.
Questions	Coaching
1. What is the best thing to do?	1. Show Steve by waving at him or motioning to him that you can't talk.
2. What do you usually do?	
3. What will happen to you if you go ahead and talk?	3. You'll get your name taken. Then Mrs. S. will be upset with you one more time.
4. What could you do so you don't get your name taken down?	

Child's Name: Terry

Behavior Rehearsal Session #2

Classroom Situation Form

Script of Situation	Criterion Response
Okay, now imagine that you're sitting in your desk. Mrs. K. has given the class some spelling words and you're supposed to be writing sentences for each one of them. But you're too fidgety to work. You're bored with school and you just don't feel like working on anything. You start monkeying around, making a lot of noise. Finally she says, "Terry, I want you to sit down in your seat and be quiet." What should you do?	1. Say, "Okay, I'm sorry, Mrs. K." Then go back to your seat and get out your work.
Questions	Coaching
1. What would Mrs. K. like for you to do?	1. She'd like for you to show that you're sorry you upset her and then she'd want you to get to work.
2. What do you usuaully do?	
3. What happens to you if you just ignore Mrs. K. and go on doing what you want?	3. She'll get real mad and then she'll punish you.

Child's Name: Terry

Behavior Rehearsal Session #8

Classroom Situation Form

Script of Situation	Criterion Response
Okay, Terry, let's imagine that you're in your classroom. Mrs. K. has given a math assignment and you don't know how to work the problems right so you ask him to help you. You start copying the problems from him. Then Mrs. K. tells you to get quiet and get your own work. She says, "Terry, now get quiet. You have to do your own math." It makes you really mad at her. You think she's always picking on you. What should you do?	1. Raise your hand and tell Mrs. K. that you don't know what to do. Ask her for help.
Questions	Coaching
1. What is the best thing to do?	1. Raise your hand and tell Mrs. K. you don't know what to do. Ask her for help.
2. What do you usually do?	
3. What will happen to you when you talk back to Mrs. K.?	3. You'd get into trouble and get sent to the office if she'd get angry because you didn't mind you.
4. What are some things that you do so Mrs. K. thinks you're trying to do your own work?	

Child's Name: David

Behavior Rehearsal Session #4

Classroom Situation Form

Script of Situation	Criterion Response
Let's pretend that you are in your classroom. You are sitting down in your seat trying to do your work. Billy keeps on bothering you. He just won't leave you alone. You keep getting madder and madder at him. You feel like blowing up and punching him. Mrs. K. isn't even looking, so she doesn't that Billy's being so bad to you. What should you do?	1. Ask Billy to quit messing around with me. If that doesn't work, raise your hand and ask Mrs. K. if you can move away from Billy.
Questions	
1. Do you know what Mrs. K. wants you to do?	
2. What do you usually do when someone like Billy is picking on you?	
3. What usually happens when some one is picking on you a lot in class?	3. You get into a fight and then you get into trouble.
4. What can you do so that you don't get into a fight with Billy when he's picking on you?	

Child's Name: David

Behavior Rehearsal Session #8

Classroom Situation Form

Script of Situation	Criterion Response
Now, David, pretend that you've just come back from lunch. The whole class is up, out of their seats, running around and making a lot of noise. You're up out of your seat, wandering around and looking out of the window. You aren't paying any attention to Mrs. K. or anybody else. Suddenly you see that all of the other boys and girls are sitting down quietly in their seats. They look like they're working on something, but you don't know what it is. What should do?	1. Go up to the teacher or raise your hand and ask her what you're supposed to be working on.
Questions	Coaching
1. What would Mrs. K. like for you to do?	1. She'd like for you to find out what your work is and start doing it.
2. What do you usually do?	
3. What happens to you if you don't get your assignments done?	3. Mrs. K. will be upset with you and you'll get a zero on your paper.
4. What could you do so you wouldn't get a bad grade and Mrs. K. would be happier?	

Child's Names: Earl

Behavior Rehearsal Session #1

Classroom Situation Form

Script of Situation	Criterion Response
Let's suppose that Mr. D. is called to the office to meet with another kid's mother. A teacher's aid comes into your class to take over while Mr. D. is out of the room. As soon as Mr. D. leaves the room some of the kids start to yell at each other. One boy stands up on his desk. You get up out of your seat and start to play too. But the teacher's aid is really angry. She's trying to get everyone to sit down and be quiet. What should you do?	1. Sit down and be quiet so you don't get your name taken.
Questions	Coaching
1. What are the rules when Mr. D. is out of the room?	1. Stay in your seat and do what the teacher's aid tells you.
2. What do you usually do?	
3. What happens if you act up when Mr. D. is out of the room?	3. He'll send you to the office or gives you licks.
4. What could you do so you didn't get into trouble when Mr. D. is out of the room?	

Child's Name: Earl

Behavior Rehearsal Session #6

Classroom Situation Form

Script of Situation	Criterion Response
Okay, Earl, pretend you're sitting in your classroom. You've been working on a language lesson for a long time. You're stuck on one of the questions and you just can't seem to figure it out. You finally decide to ask Mr. D. for help. You raise your hand and he comes over to your desk. Then you tell him the problem you're having. He shows you how to answer the question so you can finish your work. What should you do?	1. Say, "Okay, Mr. D., it helps when you explain things to me," or "Thanks, Mr. D., now I can get it."
Questions	Coaching
1. What is the best thing to do?	1. Show Mr. D. that you want to learn and you need his help.
2. What do you usually do?	
3. What could happen to you if you don't show that you're grateful for his help?	3. Mr. D. will think that you don't care whether he helps you or not.
4. What could you do to show that you're glad Mr. D. would help you?	

Child's Name: Troy

Behavior Rehearsal Session #5

Classroom Situation Form

Script of Situation	Criterion Response
Okay, now I want you to imagine that there's this one kid in class who really get's on your nerves. He just drives you crazy because he's really whiney and he's always telling Mr. D. on everyone. Let's suppose that one day Mr. D. is out of the classroom and no one is watching the class. You and Gina are talking and messing around. You're supposed to be working. Then this other kid starts saying he's gona' tell Mr. D. on you. He's pointing at you and saying he's gona' get you in trouble because he'll tell on you. What should you do?	1. Turn around and stop talking to Gina. Tell Gina that you don't want to talk anymore because the other boy will tell Mr. D. on you.
Questions	Coaching
1. What are the rules when Mr. D. is out of the classroom?	1. He leaves someone, a monitor, in charge to take names of people who talk, cheat or get out of their seats and play around.
2. What do you usually do when Mr. D. is out of the classroom?	
3. What does Mr. D. do to the kids in the class who act up when he's out of the room?	3. He gives you a "talking to" or a warning. He makes you stay in at recess or takes some other privilege away.
4. What can you do so that you don't get into trouble when Mr. D. is out of the classroom?	

Child's Name: Troy

Behavior Rehearsal Session #8

Classroom Situation Form

Script of Situation	Criterion Response
Let's pretend that you've been in trouble with Mr. D. and he's still mad at you. You got into a fight because this other boy started calling you names and acting real mean. He dared you to hit him and you did. Mr. D. broke up the fight and got real angry and upset with both of you. You don't think it was your fault at all. But Mr. D. is still giving you dirty looks and acting like he's mad at you. You're pretty mad at him, too, because he's acting so uptight. What should you do?	1. After class go up to Mr. D. and tell him you're sorry that there was a fight.
Questions	Coaching
1. What would Mr. D. like for you to do?	1. He'd like for you to be quiet and your work done. He'd like for you to show that you're sorry that you get into trouble a lot.
2. What do you usually do?	
3. What happens to you when Mr. D. is already angry with you and you keep on acting up in class?	3. Sometimes he gets so angry that he sends you to the office or gives you licks.
4. What can you do so Mr. D. would stop being angry with you?	